

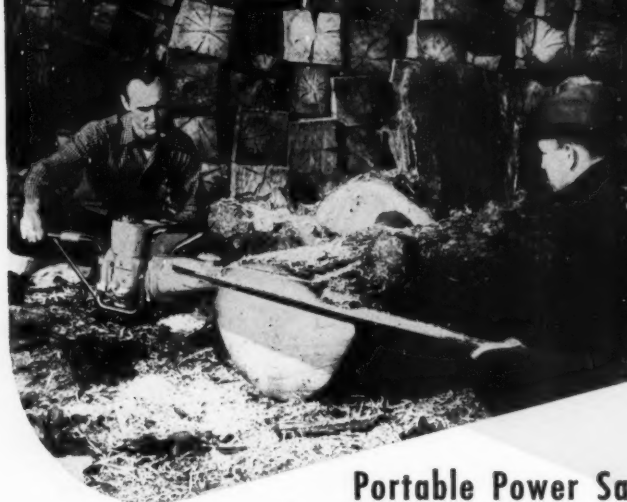


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MAY 1950

50 CENTS

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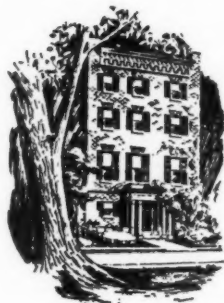
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The American Forestry Association is a national organization—independent and non-political in character—for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.

# FORESTS

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### THE COVER

In New England, the coming of Spring is a process of slow awakening. The appearance of buds on trees long skeletonized by frigid winter blasts is a most welcome sight, but like the watched pot which never boils, the development of leaves seems to take forever. The effect produced by this fresh frame of foliage is especially pleasing in John Kabel's photo study of East Andover, a snug little village tucked away in the foothills of central New Hampshire. When Spring arrives within the borders of the Granite State, can summer be far behind? For a glimpse of a region where the season is well advanced, turn to the Southland scenes depicted on pages 20 and 21.

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## LETTERS TO THE EDITOR

### The AFA and Cutting Controls

The editorial "The Right to Govern Themselves" in your January issue, coming as it does at the mid-century, can only mark the final and complete reversal of The American Forestry Association. From a position of active leadership in the conservation movement a half century ago, the association has made an about-face to that of a passive resistance.

What else can your editorial mean but "The right to continue forest devastation without federal interference?" Although you give the Supreme Court decision and state control of cutting a mild endorsement in the Washington forest regulation case, major emphasis is laid on the danger of federal cutting controls. In recent years too much energy has been drained away in this curious waste of effort. An equal amount of pressure on your part, seeking enactment by the states of really adequate and workable forest cutting regulation laws might, by this time, have proven the most effective argument against federal controls.

True, the 1946 American Forestry Congress gave endorsement to the "principle of state regulation," but there is little evidence of active efforts on the part of AFA to put this across in the state legislatures.

Yet, all the objective evidence we can find points only to a steady deterioration of the forest growing stock and a continuance of poor forest practices on large areas of privately-owned land. So you pointed out in an earlier editorial an attitude of trusteeship is needed, but this cannot and will not be adopted by private owners without some compulsion. It is all well and good to write in favor of freedom and liberty in a democracy, but how long can our democracy support freedom if our resources are dissipated? The constitution does not guarantee the freedom of private owners to abuse God-given resources.

The recent decision of the Supreme Court, in fact, permits the curbing of this freedom by the states. If the states do the job properly there will be no need for federal action. But without any action or follow-up by The American Forestry Association, or expressions of policy favoring state legislation, continued procrastination will inevitably invite federal legislation. Clearly, then, the efforts of The American Forestry Association must be bent positively toward the enactment of adequate state regulation if it is the desire to head off stringent federal measures.

Bennie Kahdub  
(Chippewa Indian)

Tower, Minnesota

### Liked Our March Cover

The cover for *American Forests*, March 1950, to me is one of the most striking photo studies that I have ever seen. This photo combines so many things I enjoy.

In the months that *American Forests* has been coming to our home, the family (four of us) has repeatedly expressed its pleasure with the message of the publication.

Fred W. Fitz, M.D.

Chicago, Illinois

### "Benefits" and Consulting Foresters

After reading the report of the hearings on H. R. 7155 (see "Conservation in Congress") in the April issue of *American Forests*, I believe it is necessary to emphasize that I was seeking no "benefits" for consulting foresters, unless one can consider freedom to perform professional forestry services without competition from tax-supported public foresters as a "benefit."

If the program proposed under H. R. 7155 is confined to educational demonstrations for owners of forest properties too small or too immature for early profit realization by the owner, the program might well be of benefit to forestry as a whole and will not be in serious competition with professional men seeking to earn their own way. This type of program is apparently the aim of the U. S. Forest Service men in charge of the overall program. Speaking for the consulting foresters, I wanted this clearly indicated in the law and in the legislative history which will serve to guide the public foresters on the ground. At the hearings, Robert Moore asked that the project be given a definite termination date in order to emphasize and give validity to Forest Service testimony that the program was designed to meet a present "need." I hope we have not gone so far down the road to statism that freedom from tax-supported competition can be considered a "benefit."

A. G. Hall

Washington, D. C.

I was utterly amazed to read the "report" of the hearings on H. R. 7155 as published on pages 30 and 32 of your April issue.

The statement that A. G. Hall and I "representing the Association of Consulting Foresters asked some assurance that consultants would benefit under the act" is contrary to facts. Our testimony did not ask for any "benefit" under the act. I did ask that the word "small" and a satisfactory definition of it be made a part of the act. Much of the testimony of the proponents of the act dealt with the need for aid on the part of the "small" owner and I merely asked that the word be included in the text of the act. Certainly that is not an unreasonable request.

My testimony followed that of Mr. McArdle (of the U. S. Forest Service). It did not precede his testimony as the published report indicates. When Mr. McArdle stated, in effect, that it was the intention of the proponents of the act to continue the "free" aid and services indefinitely, I asked that a date for the termination of the authority given in the act be inserted. I did not even suggest what that date should be. Certainly that is not asking for any "benefits" unless a new definition of the word is in the making.

Robert Moore

Danville, Pennsylvania



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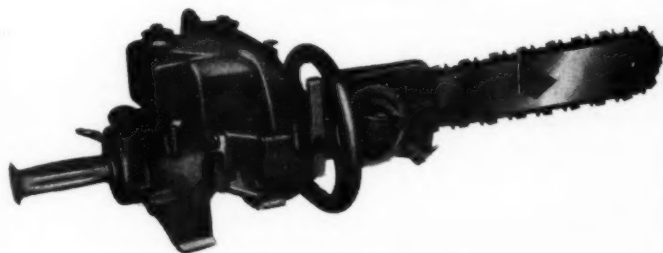
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## Yosemite Field School

The Yosemite Field School offers men and women intensive, varied training in the presentation of natural and human history to the general public. It gives practice in the techniques of interpretation—on nature walks, with groups of children, before campfire audiences, and in museum lectures. It takes up related matters such as museum methods and administration, and the use and preparation of museum and library materials. It considers the organization and functions of the different departments within the National Park Service, their problems and interrelationships.

The naturalist program offers a diversified daily program in Yosemite Valley, as well as a series of weekly events at three outpost stations. The Yosemite Museum possesses a specialized library, an herbarium, zoological and geological study collections and audio-visual equipment. The park, containing 1189 square miles, is notable and distinguished for its natural features. Each summer large numbers of visitors from all over the world attend naturalists events in the park. All these things make Yosemite an ideal place for an apprenticeship in the interpretive use of the recreational resources of nature.

For the purpose of giving immediate experience, the work of Field School students is oriented around Yosemite materials. During the first week, experts present survey courses to give students knowledge of the geology, plants and animals of Yosemite. But the underlying emphasis throughout the summer is on principles and techniques that apply to interpretive work in natural history in all national and state parks, all nature, youth, and conservation groups, and all levels of formal schooling.

Though the National Park Service sponsors the Yosemite Field School and later may employ some of its graduates, the primary intention is not solely to recruit naturalists for the National Park Service. Instead, it is to give interested and qualified persons a practical contact with "the national park idea"—the conservation ideal—so that they can more clearly apply it in any kind of naturalist work, including school curricula, outside the national park system.

Applicants must be college graduates or show accomplishments equivalent to a college degree. They are required to submit (1) two or more letters of recommendation regarding their character and personality, maturity, interest and competence in natural history and background in the popular presentation of natural history, and (2) a statement from an M.D. that the applicant's heart can endure strenuous, high altitude hikes. Students must be in good health generally, able on occasion to walk as far as fourteen miles a day at elevations ranging to over thirteen thousand feet above sea level, and able to perform the arduous exercise associated with trail-side camping.

Owing to limited facilities, only twenty students at most are selected for each session. The proportion of men to women is usually four to one. Application blanks are sent upon request. Write the Director of the Yosemite Field School, Yosemite Museum, Yosemite National Park, California.

Donald E. McHenry


Yosemite National Park, California

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# Forest Practices on Private Lands

The tide of education and initiative is now running through our woodlands, says this eminent forester. With more good teachers, we can grow more trees—in the American way

By W. B. GREELEY

I WAS once drawn into a radio debate with Lyle Watts, chief of the U. S. Forest Service. It was a friendly debate; but we got down to brass tacks on regulation versus free enterprise. The tough problem of the American woodlot was brought out on the table. Can we get these little owners to grow trees by a teacher or must we call a policeman? I said: "Keep your police at home. Go to these forest owners with good teachers, men of the soil conservation and farm extension stripe." Mr. Watts replied: "I agree on the teachers; but I want a policeman to back them up." There is our question in a nutshell.

Some of my friends in the federal regulation camp draw a beautiful picture of the settled forest culture of European countries, where generation after generation has grown up under required woodland practices. I have seen enough of the French and German countrysides to get the feel of a settled rural economy and of a forest system long established and never questioned. I have seen the lines of sturdy country women coming out of the woods with great fagots of branches on their backs. Certainly there is not a scrap of waste.

But it does not follow that a system developed from the crowded lands and disciplined peoples of Europe will stand transplanting to the free soil of the United States. As a young man, my grandfather worked on a land-clearing crew in the Connecticut Valley. He rolled incomparable white pines into the river, to get rid of them. Another young man of his generation was splitting the choicest walnut along the Sangamon River of Illinois into fence rails. He became President of the United States. We still have much of those free land traditions in our blood. We still cherish the right of the individual to hew his own way to success or failure, to use what he has as he sees fit in a free economy.

We do well to borrow forest technologies and skills from other lands; but it is my conviction that a forest policy must

Soil Conservation Service



Seventeen farmers joined together to establish this 2000-acre tree farm in Snohomish County, Washington



be indigenous to its own country. It must reflect much more than a need for wood. It must express the national psychology, accustomed relations between government and citizen, the incentives which make the economy tick, and the accumulated experience in living with natural resources.

There is a good homemade pattern before our eyes, in the outstanding success of American agriculture. Like forestry, it has been forced to change from the wasteful exploitation of a virgin resource to its intensive use and culture. Our progress in agriculture has come from the land grant colleges, the experiment stations, the extension and soil conservation services, and from public cooperation with the farmer. Its regimentations are voluntary. And education of the man on the land to his own self-interest has been the real measure of success.

The forces and capacities native to America which will fuse into an effective forest policy of our own, are at work all around us. The industrial drive and constantly expanding technology of a free capitalism have taken over a large part of the problem. Just recently Ernest Kurth of Lufkin, Texas, was proclaimed first citizen of the South. This honor was not accorded to Mr. Kurth because of his long success as a manufacturer of southern pine lumber. It was because he pioneered the techniques, took the risks and gave the South its first newsprint paper mill. An essential part of that new industry is the growing of pulpwood through forestry on company lands and millions of trees distributed among the farmers of east Texas.

That illustration of free enterprise at work in our forests can be duplicated many times. After the loss of Cloquet in Minnesota and 250 thousand acres of woods by the fire of 1918, Rudolph Weyerhaeuser and his associates restored the town and the economy of the region by new proc-

esses which utilize the weed trees and waste woods of the North. Entirely new industries were created by technology and forestry. A man named Mason (Masonite Corporation) discovered how to blow fibers apart by internal explosion. His invention established another new industry in another old, logged out section of the South. It created a market for waste woods and young timber. It has now established a second permanent center of forest industry in California.

The technologies which have brought about 14,000 commercial products from paper and have sustained the unbroken rise in its per capita consumption have put a powerful impetus into American forestry. The spread of pulp and paper mills through the South in the last twenty years has brought profitable forestry to the door-yard of every woodlot owner in the region. In the Northwest, as in the South, forest industry is moving into the integrated manufacture of different products under the same management. Operations are now producing plywood, lumber, kraft pulp or fiber-board from the same stand of timber, and indeed, from the same tree. One of them even converts the bark into plastic powders and fertilizer.

These technical advances are steadily increasing the capitalization of forest industry; and thereby they make the growing of trees an essential part of the business. The day of the migratory sawmill, or the "cut-out and quit" timber philosophy, is about over. Plants costing well up in the millions do not pick up in a few years and move to Oregon. Assured supplies of wood, in place, are essential to their financial structure. That simple economic truth is one of the firm supports of an American forest policy resting upon free enterprise.

Evidently the men who believe in federal regulation have quit worry-

ing over the twenty-one percent of our forest lands which are in the larger, industrial ownerships. The timber survey of 1945 showed a strong trend among them toward good forest management. One hundred and forty-seven industrial properties in the eastern states are kept in continuous production. In the West, a third of the industrial forests are in tree farms. And the great bulk of these properties are under sustained yield management or headed toward it.

The regulation searchlight is now turned upon another sector of the front—upon the fifty-six percent of our woodlands which are broken up into four million little forests. The average showing of the woodlots in forest practice is poor. Here, we are told, is the "hard core" of the private forest problem. Here is where the policemen are most needed.

Let us admit that this job is tough and challenging. It is still my conviction that we will make headway upon it far more effectively by marshalling the forces and incentives indigenous to this country and its people than by drawing upon totalitarian policies of foreign origin. It can all be summed up in the word, *education*—the education of people in the American way, to know on which side their own bread is buttered. We have a native genius for getting results by that means. It is part of our democracy. And we are much farther along in spreading good forest practice by education at the grass roots than most of us realize.

Education of the small woodland owner was part of the earliest forest conservation in this country. It was a cardinal feature of the Clarke-McNary Act of 1924. The Norris-Doxey Act of 1937 carried federal cooperation into the actual management of farm woods, into timber estimating, marking trees for cutting, even finding purchasers for them. The federal Soil Conservation Service brought a new and very practical kind of forest education to the farms in 1935. Any farmer in a soil conservation district may obtain a working plan for his woodlands and expert help in carrying it out. The present soil conservation districts contain 120 million acres of woodlots. Twelve million acres of stand improvement cutting and 700 thousand acres of tree planting are included in their current projects.

Counting in the aggressive program of the Tennessee Valley Authority, the organizations maintained by Uncle Sam or in which he is a



cost-sharing partner have 375 foresters in the field, teaching and assisting small woodland owners. Last year they distributed over 125 million trees for woodlot planting. Extension agents have enlisted 23,000 local leaders to assist in promoting forestry in their respective communities. New Hampshire now has an extension forester in every county and 800 demonstrations of good forestry covering every section of the state.

The report of the Chief of the U. S. Forest Service for 1949 hardly indicates that the American woodlot is past redemption. It says: "Many thousands of farmers last year conducted such forestry activities as planting, thinning, pruning and selective cutting." Under the Norris-Doxey Act, the report continues, "improved management practices were applied to 1,769,240 acres of small woodlands by 17,140 individual owners." More than 3,000 additional requests for help could not be served by the farm foresters for lack of time.

The regional experiment stations of the Forest Service and their outlying pilot plants have developed remarkable skills in teaching the ABC's of woodlot management. The best demonstration of paying forestry I have ever seen is the "Farm Forty" operation at Crossett, Arkansas. To maintain the maximum growth rate and show that forestry can pay off as often as a cotton field, some cutting is done on that little tract every year. Each fall, the year's crop is piled out by the highway and the whole county comes to see it. There is a pile of pine logs, ricks of pulpwood; some gum and oak logs, hickory handle bolts, and a few cords of rough stuff suitable for fuel. Every pile is marked with its quantity and value. The Crossett "Farm Forty" is returning a net stumpage of \$8 an acre every year.

In addition to the 375 teaching foresters under the cooperative federal program, 280 are employed on the same type of work by the states. Forest management is the most active phase of state organization today, as fire control was twenty years ago. Half the timber cut of New Jersey has been brought voluntarily under technical direction of the state's forestry division. This is done under an ingenious combination of technical services by foresters from the public agencies with business management by experienced timber men selected and approved by the state.

Many other states are providing free service to their woodlots in tim-

ber estimating and marking. South Carolina and Virginia are marking the cut on woodlots at cost rates paid by the owner. South Carolina charges fifty cents for each thousand feet of sawtimber marked, and thirteen cents for each cord of pulpwood. The state men also furnish sample cutting contracts and help woodland owners to find purchasers. Virginia had 1,563 requests for timber marking in 1948; and neither state can keep up with the demands for this practical help.

An extremely interesting phase of the outward spread of forestry is the legislation of many states for growing trees by local regulation or by inducements. Here is another distinctly American asset, now active in making a forest policy of our own. It is our training and capacity for local self-government. It goes back to the New England town meeting

and its principle, that the men who vote the woodchuck tax should be the men who pay the woodchuck tax.

Early attempts of several states to curb destructive logging, like the seed-tree laws of New Hampshire and Louisiana, were ahead of public opinion. They failed from lack of enforcement; and their failure gave the possibility of effective state forest policies a black eye. The awakened interest of the last ten years and the pressure for federal control have led thirteen states to undertake their own ways to get good forest practice on private lands. These solutions show great diversity in ideas. The old democratic process is at work again.

Four states—Oregon, Washington, Mississippi and Virginia—have enacted mandatory cutting rules. Indiana has legislated the mandatory

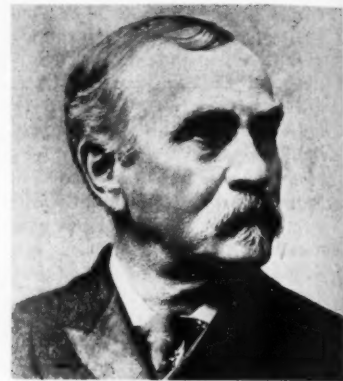
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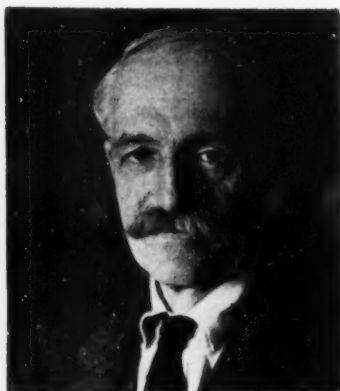
Education of the man on the land to his own self-interest has been the real measure of the success of American agriculture, according to Author Greeley

# The 10

## Most Influential Men in American Forestry



J. Sterling Morton



Gifford Pinchot



Theodore Roosevelt



Henry S. Graves

By HENRY CLEPPER

*Executive Secretary, Society of American Foresters*

"THE (19th) century was a dark page in America's handling of its natural resources but it was not without a bright side. Thinking men in increasing numbers began to challenge the government's lack of protection of public resources. Settlement of the prairies where homebuilding encountered a treeless environment helped crystallize a national consciousness that the forests were not after all inexhaustible. In 1873 the American Association for the Advancement of Science at the instigation of Dr. Franklin B. Hough, of Lowville, New York, memorialized Congress and the states to enact leg-

islation to protect the forests. Two years later Dr. John A. Warder called together a group of citizens in Chicago, September 10, 1875, and organized The American Forestry Association for the public promotion of forestry and timber culture. This marked the first organizing of national public sentiment in America."  
—From *American Conservation*.

That the past seventy-five years have been a great era for forestry no student of the conservation movement can deny. Historians of this period will doubtless devote much learned discussion to the rise of forestry as a

profession and the gradual application of sound forest practices to the nation's woodlands.

But the actual accomplishment of the era can be summed up in a single sentence. During this relatively brief span there were developed in America a system of national and state forests and parks, and an ever increasing acreage of private land under management, the like of which is not duplicated—in extent or in economic importance—in all the world.

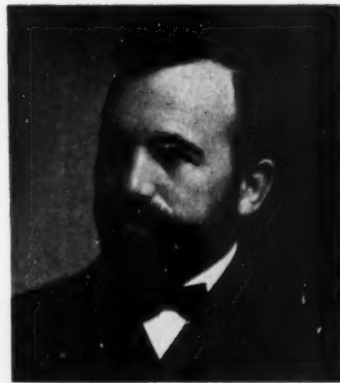
In short, the rise of forestry, both as a profession and as a force for the public welfare, has been a typical American phenomenon. Born in cru-



**Bernhard E. Fernow**



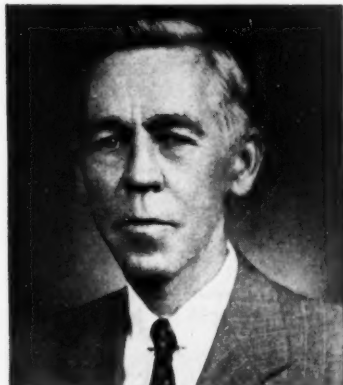
**Joseph T. Rothrock**



**Filibert Roth**



**William B. Greeley**



**Ovid Butler**



**Franklin D. Roosevelt**

sading zeal, it weathered political opposition and public inertia to become deeply rooted in the American way of life.

Moreover, as forestry gained strength it brought about other concomitant developments—the conservation of water, soil, wildlife, grass, and other renewable resources. Without wishing to detract from the importance of these other aspects of conservation, one can assert without exaggeration that they succeeded because forestry blazed the trail.

Forestry has made history in America. But history is hard to understand if it deals only with abstractions and generalizations. Events happen and history is made because men toil and fight and dream. As Emerson said, "There is properly no history; only biography."

Forestry has reached its present eminence because thousands of men and women, for the most part working humbly and obscurely, contributed their ideas, time and effort to a cause. But in forestry, as in every progressive movement since the world began, certain individuals gave more of their time, more of their brains, more of their energies than others.

Having an insatiable curiosity about those individuals, great and otherwise, who have made forestry what it is in our times, the writer recently challenged himself to name the ten men who were most influential in American forestry during the past seventy-five years. An interesting subject to speculate about, it admittedly has innumerable possibilities for honest differences of opinion. Accordingly, in offering these selections,

he submits them as one forester's opinion only.

Listed in the approximate chronological order of their appearance on the forestry stage, they are as follows:

J. Sterling Morton, Bernhard E. Fernow, Joseph T. Rothrock, Filibert Roth, Gifford Pinchot, Theodore Roosevelt, Henry S. Graves, William B. Greeley, Ovid Butler, and Franklin D. Roosevelt.

**Founder of Arbor Day** — J. Sterling Morton (1832-1902) was a farmer, a journalist, a politician, a territorial official, and Secretary of Agriculture. But the achievement which has assured him a place in history was his designation of Arbor Day. At a meeting of the Board of  
(Turn to page 30)

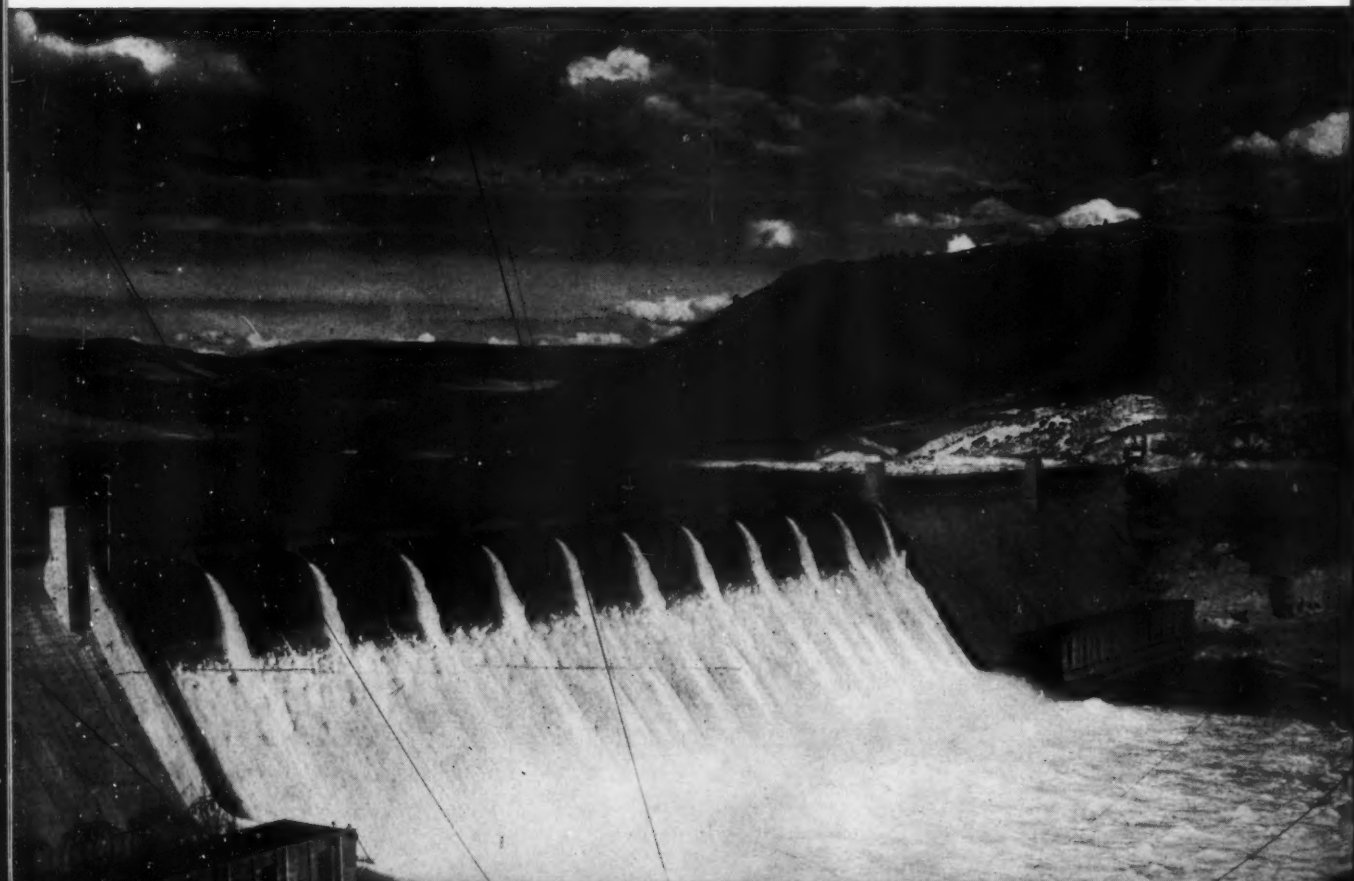




K. S. Brown Photo

Two out of every three acres of forest in the Columbia basin are already under good management — and as for power, existing dams, topped by giant Grand Coulee, make the basin today the most highly electrified area in the nation

Bureau of Reclamation



# CVA

## What You Should Know About

**Pacific Northwest foresters shudder  
at thought of what could happen to  
their regional program, perhaps most  
advanced in nation, under proposed  
CVA. So will you after reading this**

**By A. G. HALL**

**"S**HOULD CVA become law, I would suggest Moscow, Idaho, as the administrative headquarters for the super bureau it would create, and then dedicate the site as the burial ground of human freedom."

These are the words of the state forester of Idaho when asked recently to comment on how a Columbia Valley Administration, as advocated by President Truman and proposed in Congress by Senator Warren G. Magnuson of Washington and a long list of co-sponsors, would affect forestry in the Pacific Northwest.

"For state, industrial and private foresters," he went on, "would discover themselves relegated to puppet roles. No plans for fire control, forest cutting, reforestation, or any other activity could be executed without the full blessing of three CVA commissioners the President would be empowered to appoint."

He was referring to the three \$17,500-a-year directors authorized by the Magnuson bill who, answering only to the President, would be "responsible for policy, directive and general supervisory functions" of the CVA program. No need to remind any citizen that policy and directive have long been the purview of the Congress.

Idaho's chief forester by no means stands alone in his convictions. More recently another Northwest forestry spokesman had this to say: "Under a CVA as proposed, state foresters would be able only to advise on policies regarding forestry organization and management. There is no provision in the bills giving them a vote or a voice of authority in matters con-

cerning state and private lands. Even the U. S. Forest Service could become a minor element in the overall planning. As I see it, the potentialities of the present bills could mean the end of private forestry."

Indeed, so far as this writer has been able to determine, the great bulk of foresters—state, federal and industrial—share the opinions expressed by these spokesmen. Federal foresters, however, are reluctant to speak for publication. The Secretary of the Interior and his top-side staff are actively engaged in promoting the CVA. And the Secretary of Agriculture has silenced U. S. Forest Service personnel by his endorsement of the CVA idea. Yet, even he must realize that his regional foresters and supervisors of Northwest national forests would become low men on the CVA totem pole.

Before analyzing the Magnuson bill (S. 1645)—and the purpose of this article is to alert all citizens to the dangers it holds for forestry and other natural resource conservation—it is necessary to examine some of the distorted claims, much of it plain hokum, made by CVA proponents. For example, this quotation from the booklet, *The Story of CVA*, published by the League for CVA:

"Under CVA timber cutting will be controlled in the public interest. There will be no more 'public-be-damned' timber slashing such as has brought this great resource to near exhaustion."

"Under CVA lumbering will be selective. A certain percentage of the trees will be left standing. Beauty spots will not be destroyed."

"More important, tree farms will

be established. A scientific program of reforestation and of planting completely new forests will be set in motion."

"Thus our greatest resource will not vanish. Through planning and foresight it will be with us always; a source of jobs, payrolls, homes and beauty."

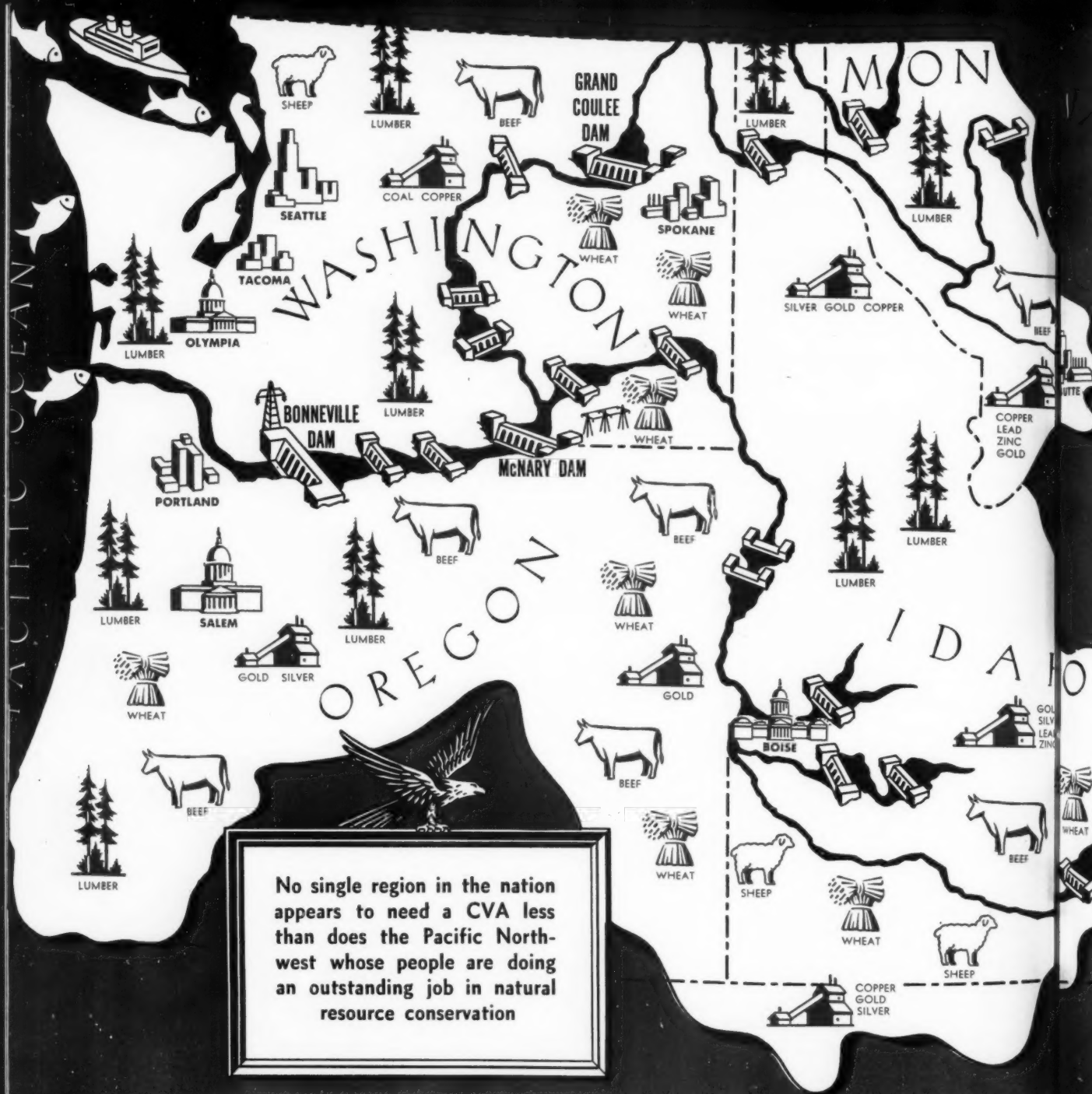
"With reforestation will come the development of fine grazing lands for cattle and sheep. In good forestry, trees are planted so that they are spaced wide apart. This allows each tree to grow straight and true into the finest kind of timber."

"These wide-spaced forests make superior grazing land. Special grazing grasses thrive when planted among these trees. The cattle and sheep grow plump, with fine firm flesh for the finest of steaks and chops."

"The livestock fertilize the soil and the forests shelter the livestock from wind and weather and both do better because of their partnership in CVA."

It is hard to believe that anyone would fall for this hokum. But, sad to relate, because the public, particularly in the East, is not too well informed as to the true situation, far too many readers of this fanciful little story will accept without question that trees planted far apart will grow straight and true into fine lumber—that cattle will thrive on the grasses that may perchance grow in the shade of those trees. To say this is a misstatement of fact is to be generous.

This same publication points out, and credits the U. S. Forest Service as its source, that at the present rate of cutting privately-owned timber will be gone in eighteen years—that *all* timber, public as well as private, will



disappear in twenty-five years. The U. S. Forest Service, of course, disclaims this statement.

It is on such false and preposterous statements as these that the CVA idea is being promoted in the Northwest—over the whole nation, in fact. Presumably, the plan is to bring the thinking of the masses around to demanding a CVA, even if it is necessary to resort to such phony propa-

ganda. The plan also includes a "whipping boy," the utilities companies—an approach that has a familiar European ring.

Another device being used is the inference that the proposed CVA is just another TVA (Tennessee Valley Authority). Actually, about the only similarity between TVA and CVA is in the initials. The Tennessee Valley Authority was established in an area

of run-down resources, low economic level and, at the time, one with little to brag about in public and private resource management activity. On the other hand, the Columbia Basin needs a super bureau probably less than any other area in the United States.

About all that is needed to maintain the Northwest as the richest region in the nation is to let the people alone—give them the opportunity to



efficiency of the federal land management agencies has been proposed by the Hoover Commission. Where the Department of the Interior is concerned, personnel now actively promoting CVA instead of doing the job of cooperative land management which existing law requires them to perform, should be reassigned. Several proposals have already been made for authorizing an interstate compact.

This would be the easy solution. It could be developed within the framework of our present government—and, in comparison with a CVA, at a considerable saving in money and human rights. But this is not what the super planners want. They are driving toward a blanketing of the nation with super bureaus. The original idea appeared to be the establishment of a valley authority at a time—but Representative Rankin of Mississippi, disclosed the whole plan when he introduced his bill (H. R. 894) to set up nine such authorities covering the whole country.

Using the power utilities and big business as a convenient target for arousing public support, proponents of CVA focus on the good which they claim their pet project will bring to the Pacific Northwest. But it is significant to note that their promotional literature rarely includes copies of the actual bills. And the most important reason power utilities and big business generally are against the proposal is that their lawyers have read these bills.

The fact is that almost any citizen who will take the time to read and digest these bills, must ask himself, "Can this be America?"

Even if CVA could do all the things its proponents promise for water, forests, wildlife, agriculture, business and human welfare, the gain would not be worth the cost.

But does the Columbia Basin need a CVA? Let's look at the record. Right now there are eighty-six major power dams operating in the basin. The per capita power ratio of the Northwest is twice the United States average. Within the basin are thirty-two major irrigation dams, supplying twenty percent of all the irrigation in this country. In addition, there are twelve major multi-purpose dams for irrigation, navigation, power, or flood control. And, currently there is no legislative impediment to further power development by either small or large business.

The Pacific Northwest now holds forty-two percent of the nation's sawtimber—and fifty percent of the for-

est area in the basin is administered by the U. S. Forest Service. Nearly 6,000,000 acres of private timberlands have been dedicated as tree farms. The bulk of private forest industries of the Northwest are engaged in timber management. They are in the lumber and pulp business to stay. Consequently, they have built up their staffs with foresters who in many cases are years ahead of the federal government in the practical application of forestry techniques. It isn't generally known, even in the Northwest, but more timber-growing foresters are employed by the Douglasfir industry in western Washington and Oregon than by the federal and state governments. This despite the fact that the federal government is administering half the forest land area.

The U. S. Forest Service and the state services are moving ahead fast in forest management and protection. The annual fire loss is down to one quarter of one percent. The Forest Service is cooperating with industry in establishing sustained-yield units whereby industry and government pool their resources for perpetual management. Both Washington and Oregon have minimum forest practice laws in which industry is cooperating.

On the other hand, some of the men in the Department of the Interior who are most vociferous for CVA have been unable to cooperate with the industries. As a result, not a single sustained-yield unit has been established on Interior land. The Bureau of Land Management, which is charged with the administration of the checkerboarded Oregon and California Grant Lands—ideally situated for cooperative management with private industry—has been unable to bring itself around to setting up fair and reasonable standards for cooperation. As this is written, private industry in the Northwest is protesting vigorously, but to no avail, against the dictatorial and confiscatory measures being proposed in the handling of these lands. Yet these very non-cooperators in this government agency are plugging for the CVA and, presumably, would be right on the spot if and when CVA berths are assigned.

The federal Soil Conservation Service has made great strides within the basin. Under the service's stimulus, 120 soil conservation districts have been established, embracing sixty percent of all farms and twenty-five million acres of non-farm land. Farmers organize these districts voluntarily under state laws and decide,

continue with the increasingly good job they are doing. The situation can be improved, of course—but it doesn't call for a CVA. Reorganization and activity along sound conservation lines among the federal land agencies now in the region and an interstate compact among the state governments involved are the primary needs.

A pattern for reorganization looking toward greater coordination and

on the basis of education, not propaganda or force, what land-use measures are best for their respective districts.

Likewise, the extension services of the basin states have long-established and very effective programs in land-owner education.

With this brief summary in mind, it is easy to understand what the Pacific Northwest Development Association means when it says, "People of the Pacific Northwest believe in working to make a good system of government work better—not in junking it for a three-man dictatorship by political appointees."

The governors of Idaho, Nevada, Oregon, Utah, Washington and Wyoming have publicly opposed the CVA. So have the state legislatures of Idaho, Montana, Oregon and Wyoming, and a long list of farmers' organizations, lumber associations, cattlemen's associations, civic and service organizations. These organizations are not interested in going out of business. They can be counted on to protect the resources which mean the livelihood of themselves and their stockholders.

It is significant to note the co-sponsors Senator Magnuson assembled for Senate Bill S. 1645. They are Senators Kefauver of Tennessee, Humphrey of Minnesota, Chavez of New Mexico, Murray of Montana, Langer of North Dakota, Douglas of Illinois, McGrath of Rhode Island, Pepper of Florida, Sparkman of Alabama, Hill of Alabama, Green of Rhode Island, Taylor of Idaho, Gillette of Iowa, Johnston of South Carolina, and Johnson of Texas. A number of these gentlemen have been identified with other legislation of a socialistic nature.

But the Socialist Party itself is afraid of a CVA as proposed. On May 13, 1949, party representatives from Oregon, Idaho, Montana and Washington, after a two-day conference at Seattle, although supporting the CVA idea in principle as a desirable *socialistic* venture, expressed alarm at the "rapid trend toward collectivism without democratic controls." In other words, although CVA provided a step toward socialism, the party found it too dangerous for an unqualified endorsement.

As Raymond Moley pointed out in *Newsweek*, April 15, 1949, CVA is a death sentence for state government. And, as such, it is a death sentence for state forestry.

State foresters generally are chaffing under the threat of federal regulation of their activities under the Anderson Bill (S. 1820), but even this bill

#### READ THE CVA BILLS

Every conservationist, every citizen in fact, should read the CVA bills — and read them carefully. Write to your Congressman or to the Senate Document Clerk for Senate Bill 1645 or to the House Document Clerk for House Bills 4286 or 4287.

would give them an opportunity to please the Secretary of Agriculture before they were put under his thumb. CVA promises nothing.

The Magnuson bill applies to "those portions of the Columbia River, its tributaries, and its watershed areas which are within the boundaries of the United States, and those portions of the states of Washington and Oregon (except the Klamath River and Goose Lake basins) which are not within the watershed areas." Translated, this means all of Washington, all of Oregon except a small southern portion (which presumably will be included in the next valley authority to the south), and a good part of Idaho and Montana and portions of Wyoming, Utah and Nevada. This adds up to a total area of 225 thousand square miles.

The bill declares, "the relevant powers and activities of the Federal Government in the Columbia Valley region shall be so organized, directed and administered as to assist to the greatest possible extent in achieving the full and unified conservation development, and use of the water, land, forest, mineral, fish and wildlife, and other natural resources of the region." The people are not specifically mentioned.

In carrying out this administration, "the advice, assistance, and cooperation of the people of the region and their public and private organizations shall be sought and relied upon to the fullest practicable extent." What the "fullest practicable extent" means would depend upon the judgment of three political appointees.

CVA would be a corporation and an instrumentality of the United States under the general supervision of the President, but managed by a board of three directors "responsible for policy, directive and general supervisory functions." Policy and directive have long been the purview of the Congress, but once this law is passed Congress will lose its control over these important considerations.

Directors would be paid at the rate of \$17,500 a year, and under the bill would have to be persons "who profess a belief in the feasibility and wisdom of this Act."

If three American citizens can be found with such a belief, they will decide what is cooperation "to the fullest practicable extent" and who are the appropriate representatives of state and local governments, labor and business with whom to deal.

These three men will be authorized "to acquire real and personal property, including any interest therein, by purchase, lease, condemnation, exchange, transfer, donation, or otherwise and to sell, lease, exchange or otherwise dispose thereof." Title to all property, "with the exception of that owned by the United States and entrusted to the Administration as agent of the United States, shall be taken in the name of the Administration." Does this mean that national forests, national parks and other federal lands may be entrusted to the administration as agent? It does, if the three commissars decide that such is appropriate. As for other lands, state or private, these may become, in fact, the property of the administration if such is deemed appropriate.

The Secretary of Agriculture must have remembered that he had a Forest Service right now administering over half the forest land in the Columbia Basin. For, significantly, instead of testifying for the provisions of the various CVA bills, he spoke in behalf of the "President's program." The President's program is a rather broad one for natural resource development without the tricky legal traps and confiscatory possibilities which are written into the bills.

The three CVA commissars also could foster "the use of all lands of the region for the purposes for which they may be best suited, the most efficient conservation and sustained-yield management to assure the protection of watersheds and the permanent and increasing usefulness of cultivated lands, grazing lands, and forests, and the occupancy and use of the flood plains in the region to minimize damage and floods." The same fostering responsibility is extended to cultivated, grazing and forest land by irrigation, drainage, clearing, reforestation, reseeding, or otherwise, including, "the use of the mineral, forest, land, water, fish, and other resources of the region to assure a balanced and stable economic development."

Power will be given to three men to decide the best use of the land and its resources—three men who profess a belief in the "feasibility and wisdom" of this act!

Right now, the U. S. Forest Service and the state forestry agencies in the region are working these things out on the basis of cooperation with for-

est industries and landowners. And contrary to CVA propaganda, they will not cut the area out in eighteen, twenty-five, or fifty years. At the present rate of cutting on national forest lands of the Northwest, fifty percent of the area will *never be cut out*. Many of the forest industries still have substantial backlogs of old growth stands on which to draw while their young forests are reaching merchantable size. Those logging scientifically in second growth stands are able to sustain greater annual yields per acre than it is possible to obtain in the virgin forest. Small operators who have found how to live with or avoid present government deterrents to small business are setting up mills in areas logged over years ago. In spite of the CVA threat of dictatorship, cutover lands are being sought eagerly by prospective buyers—with little acreage available. Present owners for the most part are holding their cutovers for the next crop of timber. They still have faith in America.

The state and private forest agencies and organizations have now just about all the federal help they can absorb and still produce lumber at marketable prices. So long as this assistance is given on a cooperative basis, as it is now through the U. S. Forest Service and the Bureau of Entomology and Plant Quarantine, the industries will continue to grow timber. Strangely enough, proponents of CVA blithely ignore the fact that these present activities of cooperation and private enterprise are producing the very concomitant benefits of soil protection, flood control, water supply, wildlife, recreation, and all the other benefits which the CVA proposal promises.

Northwest industry has been given little reason to believe in the economic soundness of any proposals yet made for bureaucratic regulation of natural resources—or, for that matter, any other part of the business of human beings engaged in making a living. The present farm program fiasco is a graphic example of planners interfering with the orderly processes of sustaining and converting a natural resource to marketable products.

The whole approach of political appointees seeking power over the lives of those engaged in land management has been ideological. Only in a very few instances, with the exception of forest fire protection, has it had any contact with realism. And it should be fully realized that under the CVA, the "Administration shall, without regard to the civil service laws and the

Classification Act of 1923," employ and fix the compensation of such officers, employees, attorneys, agents, and consultants, as necessary for the transaction of its business."

If the CVA is an expression of the need for coordination of the federal and state land-management agencies in the Northwest, the President by the very proposal is admitting failure of the Departments of Agriculture and of the Interior to work together with the people of the area in the public interest. How he can move these two departments to do the jobs they are required by law to perform is a moot question, especially when both secretaries have made supporting statements for the visionary CVA, and when, unauthorized by any federal law, the Department of the Interior has some of its top officials promoting drastic changes in our form of government.

Robert Ormand Case pointed out in the October 15, 1949, issue of the *Saturday Evening Post* that Assistant Secretary of the Interior C. Girard Davidson had been detailed by the President to lead the "informative blitz" for the CVA. Furthermore, that Davidson had at his command the vast Department of the Interior whose

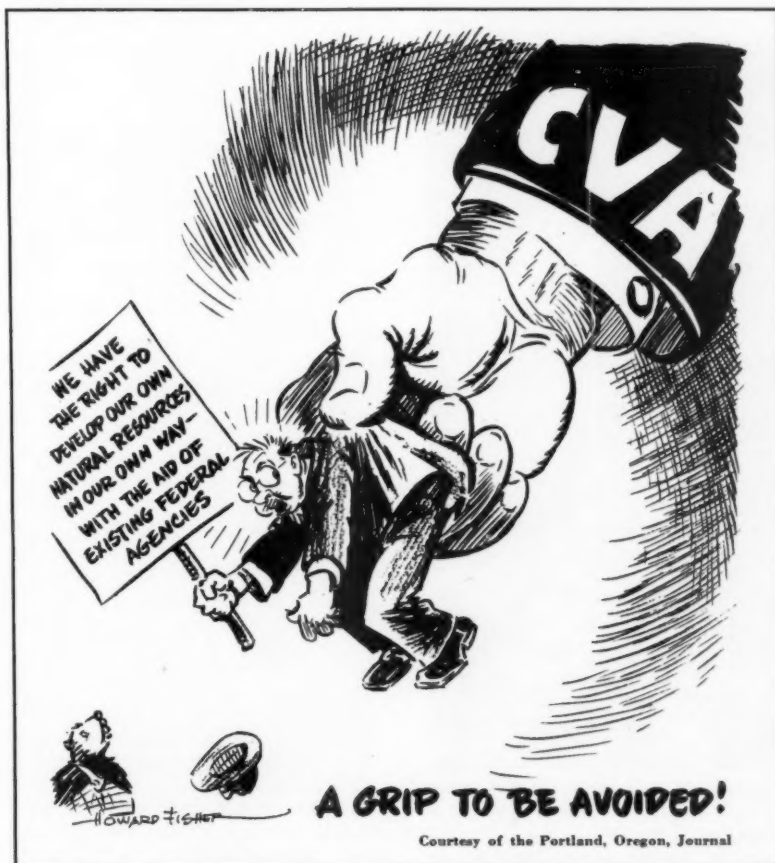
grass-roots contacts in the Northwest are "second only to those of the United States postal service."

Although Mr. Davidson told the Senate Committee on Public Works that the CVA would not absorb other land-use agencies, then Secretary Julius A. Krug told the House Public Works Committee that the comprehensive programs will "cover not only activities to be carried out by the federal government, but also those contemplated by the various state and local governments."

The bills state: "The Administration shall, in cooperation with other federal agencies concerned, prepare and submit annually to the President in connection with its budget program a statement and explanation of the anticipated program for the current year and such ensuing periods as the President may determine, for the initiation and prosecution by the Administration and other federal agencies of all major federal projects and activities having to do with the conservation, development, and use of the natural resources of the region."

Perhaps this isn't dangerous, except that the three CVA administrators would be political employees and

(Turn to page 44)







## Ankle Deep in TROUT!

When this westerner looked over Maryland's shallow Fishing Creek on opening day, he let go with some rash predictions—but a three-pound brownie made him regret every word

By F. WALLACE TABER

"KEEP his head up!" Paul shouted, obviously enjoying my plight. Ordinarily I lose all sense of everything except that of unmitigated pleasure when a three-pound brownie is parrying blows with me.

But this was not an ordinary situation. Even the lunging trout was unorthodox according to my standard, the main point of which is that five years of living in the East still leaves me a westerner. Then, too, bull-headedness is the word which best describes by nature. One, or a combination of these impedimenta was here and now costing me a steak dinner.

It happened this way. Paul, whose greatest claim to western travel included a boyhood trek into western Maryland, days before the opening of trout season, had regaled me with stories about the brownies in the ten-foot wide, ankle-deep creeks of Maryland's Catoclin Mountains. I had taken the position—and insisted to the bitter end—that large trout couldn't live, much less light out with my pet flies, in streams so small and shallow.

"Out West we shut these feeder streams off for trout nurseries," I told him in some heat.

But Paul was unimpressed. "If I can't show you at least a pound trout the first hour of fishing," he retorted, "I'll eat raw everything we catch."

That was when I got rash and offered to wager a choice steak dinner that he was wrong. The way he snapped it up should have been the tip-off.

But, as I have pointed out, there is a stubborn streak in my nature and I kept right on talking. "You cliff-dwelling easterners simply don't know what the West has to offer. If I were caught fishing trickles the size of your Catoclin streams out in the Sierra, I'd be put under observation—and rightfully so. Why this Fishing Creek, as you call it, probably originates up the canyon behind a miner's shack where the faucet has been dripping. If it supports creek chubs, it's probably overdoing its carrying capacity."

I know now that I said the wrong thing or, if the right, too much of it. Anyway, Paul practically dragged me out of Washington on the opening day in April and, as we sped through the Maryland countryside toward Frederick, dressed me down with this: "The trouble with you westerners is that you forget that American trout fishing originated in the forested streams of the East. This little Fishing Creek to which we're headed has probably given birth to more fishing pleasure than all the western streams on the map."

"You mean for its size," I corrected.

As we left Frederick a long, low chain of green hills paralleled the road as far as one could see. So these are the Catoclin Mountains, I thought. Out West they'd be anthills—maybe gopher mounds.

Ten miles farther on we left the highway and bumped across a country lane between closely cropped farms. Then, abruptly, we came upon

Hip boots hardly seemed necessary in the narrow, ankle-deep stream



a beautiful hardwood forest. A sign defaced by disgracefully but accurately aimed .22 slugs announced it as Frederick City Forest.

The road led across a small bridge which straddled Fishing Creek, all ten feet of it, and turned steeply up the valley. Dark green hemlocks began to strike sharp contrast with the still bare limbs of the gums, maples and beeches. Picturesque cottages constructed of creosoted logs and chinked with white plaster looked as though they had been designed to go with this particular forest.

Once when the valley flattened for 100 yards, the whole drainage pattern of Fishing Creek opened up before us as though we were looking at a relief map in miniature. No wonder Fishing Creek was small. Its total drainage area was certainly no more than a couple of miles wide. That

the stream flowed on a year-round basis was admirable commentary on the dividends available through wise forest management. The city of Frederick was old but its ideas were as modern as tomorrow. The foresight shown by preserving the forests on the watershed that provided its water supply might with wisdom be emulated by thousands of other cities.

Even as I was admiring the scenery, quite contented with life and the unusual lack of talkativeness displayed by Paul, the road suddenly steepened and then flattened out to reveal a picturesque lake of about twenty-five acres.

"Hey, how about that?" I effervesced. "You didn't say anything about a lake. Sure, you can get big trout out of that. You took advantage of me. The bet's off." My enthusiasm mounted as I visioned the down-



right plausible possibility that the lake might be full of hefty lunkers.

"Take it easy," Paul remarked dryly. "They don't allow fishing in the city water supply!"

"Wouldn't you know it!" I complained as enthusiasm deflated. "You'd think they'd at least let fly fishermen angle there."

"And," retorted Paul sarcastically, "what have they got that worm dunkers haven't?"

Then for the first time it dawned upon me. "Don't tell me you use worms!"

"You can use flies, there's no law against it," Paul was unshaken. "If you're the angler you claim, you ought to know that flies aren't worth their trouble on opening day. High water was meant for worms—and don't let anyone kid you."

I squirmed at the thought. "Not for me!" I emphasized. "If I can't catch them on flies, I'm not interested."

If only I had left just a slight opening, it wouldn't have been so hard to finally snip off the royal coachman and tie on a bare snelled hook slightly weighted with a small split shot. Even then I wouldn't have stooped had it not pricked my already injured pride to see Paul deftly hook two speckled beauties and one brown in waters already thoroughly covered by my coachman.

"No wonder you rely on worms, these liver-fed eastern trout haven't enough room in this trickle-sized stream to rise to a fly. Anyway, those seven-inchers you've landed aren't pounders by a long sight. Give me a worm." I tried to sound unconcerned—but I knew that Paul was inwardly smiling all the way down to his duodenum.

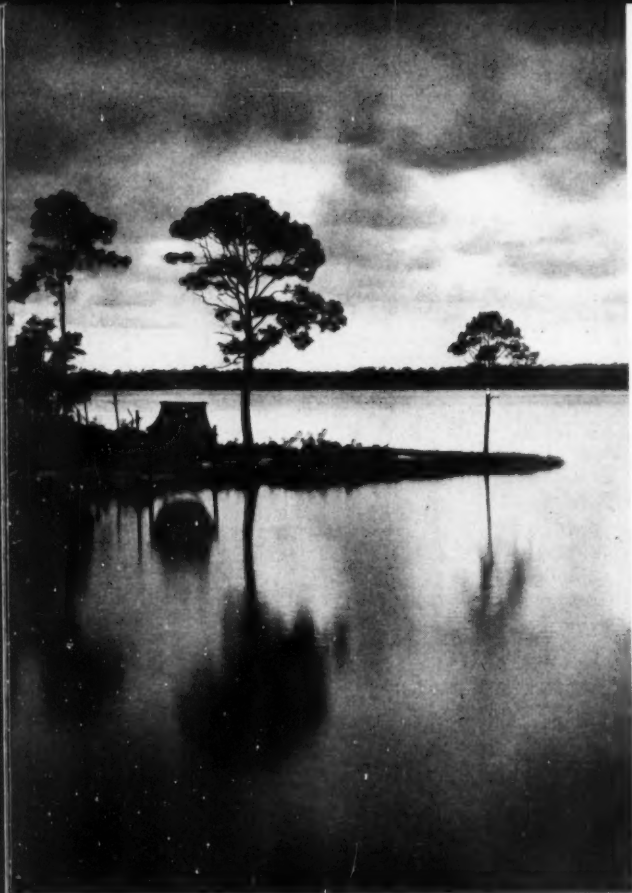
"Sure," he replied, handing me a huge night crawler. "Don't suppose those western trout ever saw a worm—don't suppose worms grow out there in that cactus and sand."

I ignored his query and tried not to show too much dexterity when threading on the proffered worm. If truth be known, my being a purist only comes from talk that ensues with long absence from my favorite sport of trout fishing. Many is the

(Turn to page 43)



The German brown that changed the author's mind about eastern trout fishing. It was taken in shallow Fishing Creek in Maryland's Catoclin Mountains



**Evening On the Bayou**

## Spring in The Southland

Even in early May, it is not unusual for residents in the northern reaches of these United States to be confronted with one last chill reminder of winter. In the Southland, however, Spring is fully entrenched with all its heady fragrance and beauty. For some this beauty means the peace and tranquillity of a sunset across still waters of a bayou; perhaps the pastoral quietude of sheep grazing on a hillside, the scene enhanced by the presence of a live oak in its eery cloak of Spanish moss. Or the trailing mossy wisps may conjure visions of beautiful garden spots abounding in festive bloom. An unexpected waterfall on Alabama's forested Clear Creek may have a special lure. Everywhere magnolias symbolize the charm of Dixie. For those who must labor yet awhile at appointed tasks, let this pictorial presentation bridge the gap

**Peace of the Hillside—Sheep Graze Beneath a Monarch Live Oak**





**Misty Grey of Spanish Moss Beautifully Drapes Middleton Gardens in South Carolina**

**In the Heart of the Forest — in Alabama, Upper Falls Cascades in Sheer Beauty**



# Extension Forester in Japan

When genial Fred Shulley was extension forester of Arkansas he little dreamed that one day he would be selling forestry to the farmers of Japan. Today, he's one of MacArthur's top specialists

By JAMES B. CRAIG

**B**ACK in the days when he was laboring as an extension forester in Arkansas, Fred Shulley would have guffawed heartily had anyone suggested that one day he would be chief extension forester of Japan and rate a private railroad car.

"But here I am," he chuckled to himself last summer. At the time he was traveling in his own private car on Honshu Island. The fact that it was a boxcar made little difference—it was his own personal vehicle. As his train skirted the coastline, Fred, stretched out in a comfortable wicker chair, could gaze out on a stately sugi forest on one side and the Sea of Japan on the other.

He was in a cheerful frame of mind. As an extension specialist under General MacArthur's command, Fred's assignment was to guide Japanese foresters and landowners back into safe and sane forestry channels. More important, he was trying to sell these people the spirit and philosophy of extension work—the real meaning behind the 4-H clubs, home demonstration and kindred groups that in America help to make democracy a going concern.

Right now he was on his way to a farm forestry demonstration, one of a series he had organized. There would be several hundred landowners present and, despite the fact it looked like rain, he knew everything would go off as scheduled. The Japanese like things to run on time,

rain or shine. He would be met at the station and escorted to the demonstration farm with ceremony. Once there, the prefectural foresters would fussily herd the people from one exhibit to the next, finishing up right on the dot.

Actually, Fred reflected, this job—at least the mechanics of it—was not unlike his old job back in America. Just bigger. Japan, with its ninety-four million acres, two thirds of it in woodlands, is about the same size as California. And forestry had made a good start in Japan prior to the war. The German influence had been helpful in that respect. Then, too, there was the natural love of most Japanese for trees and forests.

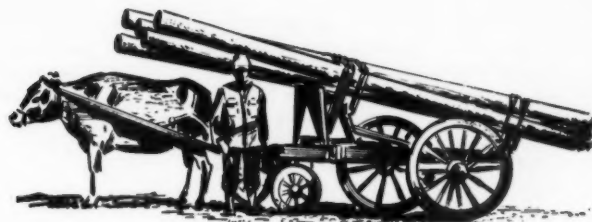
But the demands of war had made disastrous inroads on the nation's forest resources. Right now the urgent need was to check overcutting and promote needed reforestation. To do this, he was following the old USDA pattern of demonstrations, training schools, visual aids and personal salesmanship. Especially plenty of the latter.

The other part was tougher. In encouraging the Japanese to think like free men, Fred, like other Americans in Japan, was bucking the bowing and scraping, the polite malevolence and all the false values fostered by 2000 years of suppression and suspicion. This cut right through his own province — the farm forestry field — for the roots of Japanese

The Japanese equivalent of an American "Keep Green" poster tells its own interesting story. Panel on left reads (top) "Bare Mountains, Floods, Poverty" — (bottom) "Let's Stop Promiscuous Cutting." Panel on right (top) "Green Mountains, Flood Control, Prosperity" — (bottom) "Always Keep the Forest Green." It is widely distributed.







militarism were buried deep in Japan's two-acre farms. The farmers, thirty million of them, had swallowed the "Take Manchuria and End Poverty" propaganda hook, line and sinker.

And why not, he asked himself candidly? Most of them had led wretched, pinched existences for generations. There had been much scarcity and want, despite the fact that Japanese farmers commonly produce from thirty to forty bushels of rice to the acre—or double the yield produced in Louisiana rice fields. Makibi or "thinning out" — the euphemistic term for child murder — had been practiced by these tillers of the soil for generations. Baby brokers had taken their infant daughters for geisha training.

Now, at long last, sweeping reforms had been launched. The monopolistic enterprises of the Zaibatsu had been smashed. Three million acres of choice land that had previously been the property of the royal family had been broken up. A movement was afoot to homestead these and other lands and bring more acreage under cultivation. The old tax burdens were being lifted. In effect, a population was having liberty

handed to it on a platter.

What would they do with it?

Fred Shulley, for one, was hopeful. Children enrolled in the Japanese equivalent of 4-H clubs were bright and receptive. He had noted their unusual sensitivity, their fondness for all growing things. They spoke up briskly in their open meetings and voted with zest on their various policies. There was great hope, he thought, in this business of democratizing a nation.

It used to be different, of course. For generations, small boys had been thoroughly spoiled. They were encouraged to lord it over their mothers and sisters. They were never spanked. They grew up little bullies and the spankings that should have been administered for a thousand years accumulated until Pearl Harbor. It was ironic, he thought, that the strategic use of a hairbrush might have averted much trouble.

But things would be healthier now. When MacArthur moved to give Japanese women their rightful places in the social structure, a whole nation's future immediately looked up. As one Japanese educator had said, "We accepted the great machine of Western Civilization but we

**Making friends with Japanese children was easy for genial Fred Shulley. The kids often tell him he looks like Babe Ruth**



did not have the moral oil with which to run it." That Japanese mothers would help supply this needed "moral oil," now that they had a chance, Fred did not doubt. Letting the air of freedom into this hitherto tight little island was already showing hopeful results.

The fact that half the prefectures (equivalent of states) in Japan now had agricultural extension forestry specialists on the job was one indication of Japanese willingness to follow leadership in effecting agricultural reform. The people had immediately seen the good sense that prompted this program to improve farm practices and farm living through a "stimulation of initiative" and "learning by demonstration."

The procedure had been simple

importance—the one at the Saga farm near Inawashiro Lake in June, 1949 had been received with appreciation by representatives from all seven prefectures in the Tohoku region. The exhibits had effectively showed the volume and value of both rice and timber on this well-managed farm.

Farmer Saga had come forward with a wise proposition—already widely adopted—whereby production at prefecture tree nurseries was being increased. He had told his guests he was buying one-year tree planting stock from the nursery, growing the stock on his farm as transplants for one year before planting permanently in his timberland. He had 724 sugi and 409 larch seedlings in a garden strip near his house. This practice, he said, was saving two years' grow-

Arthur Spillers, of the U. S. Forest Service, had told an audience of Fukushima prefecture specialists on a recent visit to Honshu. Fred, watching the audience, had seen these people nod their approval. This was something they could understand. They knew too well the flood dangers inherent in the precipitous, clearcut slopes in their country. They want to see those barren slopes green once again.

The procedure followed in Fukushima prefecture officially launched the extension program in Japan. Now it was being repeated in other prefectures. Eventually—perhaps later this spring—prefecture foresters (comparable to state foresters in the United States) will be appointed to supply more momentum to the growing forestry effort.

Inspiration and guidance—those were the two things most urgently needed by the willing but sometimes misdirected people of Japan, Fred told himself. Was he getting across to them? There were disappointments, of course, but now that he was learning the language it seemed to him results were increasingly satisfying.

The thought often struck him that many of these farm families were not unlike people he knew back home, just poorer. The friendly children who sometimes told him he looked like Babe Ruth were pretty much like children everywhere—shy and capricious in turn, but always interested. The grownups invariably evinced in-

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Forestry leaders from seven prefectures in the Tohoku section attended the first demonstration on the Saga Farm in Fukushima.

and was proving effective. The program launched in Fukushima Prefecture was a good example. Fred had gone up there with two other Americans and held a meeting at an experiment station with 225 Japanese agricultural leaders. A prefecture extension committee had been quickly appointed, a director named, and a staff of agricultural specialists put to work, including a forester.

Working smoothly, these leaders had put their show on the road by carrying their program to the landowners. Many of these agents are identified by their green bicycles, badges and armbands—and this practice is growing. The importance of "timber as a crop" and the fact that the timber cho (acre) is entitled to the same caliber management as the rice cho was played up in personal visits, by striking posters and by demonstrations.

The demonstrations had maintained a high standard. The first of any

ing time in the prefectural seedling nursery, thereby increasing production.

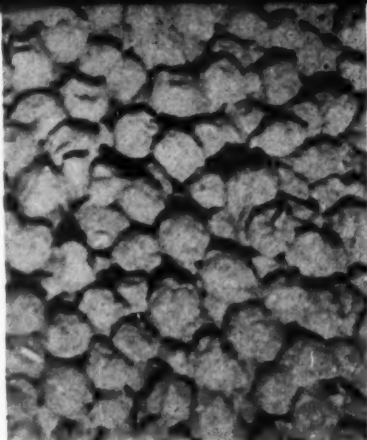
Specialists at the Saga demonstration had urged that seed collection, planting, thinning, selective cutting, shelterbelts, fire and insect protection, utilization, watershed protection and community forests all be stepped up at once. Agricultural agents should "carry the ball" on all these projects, they declared.

Good progress was being made, too, Fred thought. Shelterbelts to protect the croplands of 750 families of Takase and Otsuki villages were already under way. A concerted drive to check serious floods on the Kitakami River in Miyagi and Iwate prefectures had been started, a watershed management committee named, and a major effort being made to teach farmers to handle their hillside timberlands properly.

"Make the water walk off the mountains—don't let it run off,"

The Sagas, father and son, are leaders in forestry work





Pelletized seed

# Will Pellet Seeding Work?

Here is a revealing report on results of first large-scale experiment in range reseeding by the aerial pellet method launched four years ago on Indian lands in the Southwest

By JOE A. WAGNER and CLARENCE P. KINKOR

About six years ago, Dr. Lytle S. Adams, retired Seattle dentist with an inventive turn of mind, developed a "pellet" technique for reseeding large areas of western rangeland from the air (see "Seeds Away!" by H. H. Henry in *AMERICAN FORESTS* for March 1947). Initial tests of the "pelletized seed"—a mixture of clay, grass and legume seed, rodent and insect repellent and growth-promoting chemicals pressed together in a small hard ball—were successful enough to convince the Department of the Interior that large-scale experimentation was in order. As a result, a 90,000-acre experimental seeding on Indian reservation lands in Arizona was begun in 1946, and the following article is a report on the effectiveness of this project by two on-the-ground observers. Mr. Wagner is range supervisor and Mr. Kinkor soil conservationist attached to the Papago Indian Agency at Sells, Arizona, where the first of the seeding experiments was carried out—EDITOR

**B**ETWEEN April, 1946, and August, 1948, a total of 90,000 acres was seeded by the airplane pellet method on lands under the jurisdiction of the Bureau of Indian Affairs, Department of the Interior. Four Indian reservations were involved in the project—the Papago, San Carlos and Hopi in Arizona, and the Navajo in Arizona and New Mexico.

These areas were selected because they offered different conditions for the seeding experiment: the Papago because of its desert shrub type at an elevation of approximately 3000 feet; the San Carlos because of its desert foothill grass type at an elevation of 4500 feet; the Hopi, at an elevation of 5500 feet, because of its flood plain grassland type; and the Navajo because of its forest types at an elevation of approximately 8000 feet.

All areas were seeded by airplane,

using pellets containing various species of grass and legume seed. The pellets, ranging in size from a quarter to three eighths of an inch, were a mixture of clay, seed, rodent-insect-repellent and growth-promoting chemicals. The rate of seeding was one pellet to a square foot with an average of six to eight seeds in each pellet.

It is still too early to reach final conclusions on the experiment as a whole, but technicians on the reservations have made the following observations: on the Papago, seeding resulted in an average of but seventy-five plants to an acre; on the San Carlos, a year after seeding, technicians failed to find a single specimen of Lehmann lovegrass, though 800 pounds were planted; and on the Hopi results presently observable cannot be considered even partially satisfactory. The Navajo plantings are too recent for a fair appraisal of results at this time.

Before looking closer at these various projects, however, it might be well to examine the method of planting in more detail.

The clay used in manufacturing the pellets was obtained near the area where the seeding was in progress. It was chosen on the basis of favorable colloidal content and cohesive-ness (no less than twenty-five percent clay). Quartz grains were undesirable as they tended to abrade the pellet-making machinery.

The number of pellets per pound varied between 1450 and 1500 for the quarter-inch size, from 420 to 500 for the larger size. The number of seeds per pellet ranged from two to fifty-nine. Airplane loads varied from 300 to 1600 pounds of pellets depending on altitude and terrain. One load usually covered an area of from eighteen to forty-eight acres.

Besides seed, the pellets contained portions of dry lime-sulphur intended

as a rodent repellent and ammonium sulphate to stimulate growth. However, technicians on several of the reservations found that rats still ate the seed from the treated pellets with apparent relish. The effect of the fertilizer could not be determined, but the amount was necessarily restricted to prevent damage to the seed.

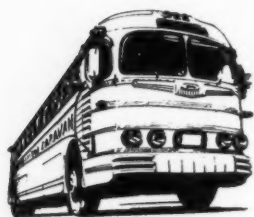
Contrary to expectations, observers found that penetration of aerially sown pelletized seed was practically nil. In the first tests made at Papago in the spring of 1946, several Indians were stationed around a range pond to observe the spread and pattern of pellet distribution. The soil at water's edge was so soft and wet that tracks of small birds were readily visible, yet the pellets failed to penetrate. Only on the sides of loose gopher mounds or in plowed furrows or ridges where pellets hit at a ninety degree angle was any penetration noted.

Aerial seeding on the Papago reservation covered 10,000 acres. The seeds, planted from April to June in 1946, were Lehmann lovegrass and sand dropseed in a two-to-one ratio. Summer rains followed the plantings and the amount of moisture and its distribution were favorable during the hot months. Winter rains were below normal but sufficient to maintain winter annuals and permit growth of Lehmann lovegrass. In 1947, summer rains were approximately one inch below average, but growth of native grasses and Lehmann lovegrass was normal. The next winter and summer seasons were dry—the se-

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# Conservation Caravan

A busload of Montanans from all walks of life took a tour last summer and learned that "conservation is everybody's business"

"Everybody here? Let's roll!"

A chartered Intermountain bus bearing huge signs "Montana Conservation Caravan" on either side crossed the Clark's Fork River bisecting Missoula and started up the Bitterroot Valley. In it was a group of people representing widely differing occupations and backgrounds brought together by a common interest in natural resources. Sponsored by the Montana Conservation Council, the objective of the caravan was to better acquaint representative citizens with the major natural resource problems of western Montana.

As the bus headed up the valley, Charles West, Hamilton rancher, launched into an account of Bitterroot history, onetime beloved home of Chief Charlo and his Flathead tribe, a valley famous for its apples and agriculture, livestock and timber, its fishing and hunting.

Just above Florence a stop was made to inspect cooperative range reseeding tests conducted by the U. S. Forest Service. Then, as the tour resumed, Stanley Antrim, a rancher from Stevensville, acquainted the group with problems of the sheep and livestock business, of his efforts toward extensive range reseeding. Tom Rogers of the Agricultural Conservation Administration, and Harold Hagen, another Stevensville rancher, talked about soil conservation, of the problems of small-farm agriculture.

Before the day was over thirteen speakers, mostly landowners, had given an overall picture of the various natural resource problems of the valley. And this was the pattern followed during the remaining five days of the tour. The scene changed greatly from day to day, of course,—

By KENNETH P. DAVIS

but the basic theme was the same. This centered around the interdependence and unity of mountains and valleys, of streams and crops, of timber and industry, of agriculture and wildlife. Brought out, too, was the common interest and stake in conservation of various occupation groups, between foresters and soil conservationists, college professors and ranchers, trade unionists and businessmen, housewives and sawmill workers, high school teachers and sportsmen.

The idea of this means of acquainting citizens with their natural resource problems was born in the

summer of 1948 when representatives of seventeen organizations and groups met at Montana State University in Missoula, and formed the Montana Conservation Council. The need for a general association or council had been apparent in the state for some time—a medium through which all groups interested in conservation could join together in considering common problems and furthering a common understanding and application of conservation practices. The Montana Conservation Council provided that means.

As organized, the council is informal—and anyone can become a member by the simple fact of participation. The writer, serving at that time as dean of the School of For-



Where members of the caravan inspected the Hungry Horse Dam project



estry at the State University, was named president—later succeeded by Nicholas Helburn, professor of geography.

At its first meeting, the council undertook two major projects. The first was the Montana Conservation Caravan; the second, to see what could be done to strengthen conservation education in the schools of the state, both through teacher training and in the classroom.

Since the council was without funds, the problem of financing the caravan first had to be solved. This was done by its versatile secretary, Mrs. Carolyn Madden, who at one time had been associated with a troupe of amateur theatrical players. Under her direction, the troupe gave a series of performances in western Montana towns—the money thus raised going toward underwriting the venture. As it turned out, fortunately, the caravan proved to be self-supporting.

A well-balanced itinerary was developed by a nine-man committee headed by John Drummond, Montana extension forester, and tour information sent to many individuals and organizations. Then came the big question: would the caravan idea appeal? Would groups and organizations sponsor representatives? The idea was to bring together a key group representing as many interests as possible. Then following the tour each participant would return to his or her own group carrying a broader picture of what conservation means to Montana.

The idea had force and caught on. The Montana Association of Soil Conservation District Supervisors supported it. The Western Montana Fish and Game Association voted to send along high school and elementary school teachers from Missoula. Winton Weydemeyer, master of the State Grange, gave it active support and brought in participation by the Grange people. The Montana Federation of Labor was keenly interested and sent three representatives. The federal and state forest and conservation agencies got behind it, as did the state university and the state college.

By the take-off day in July 1949, an extremely well-balanced group was ready to go. It included three ranchers representing the Grange and soil conservation district supervisors; three lumber and sawmill workers representing labor organizations; two housewives; a high school student and a high school principal; a high school teacher and two elementary



On the Cabinet National Forest, Supervisor Clarence Sutliff explains how a recently logged area reseeds itself under proper management.



Good range management is vital to the important livestock industry of Montana. Here the caravan inspects a range reseeding project.



Nellie Avery, member of the caravan, learns the secret of an increment borer, used to determine tree growth. Carolyn Madden (left) looks on.

school teachers; a businessman-sportsman representing a chamber of commerce; a lumber salesman representing the Anaconda Copper Mining Company; representatives of the U. S. Forest Service, the Soil Conservation Service and Bureau of Land Management; the state extension forester; a professor of geography and a forestry school dean.

The "charge" given to the caravan on the first day sums up the general spirit and purpose of the trip:

"You are taking part in a real 'first'—an adventure in relationships on a matter of vital importance to Montana. As a group, you represent varied backgrounds and occupational interests. That's part of the caravan idea—that people from many walks of life, with a common interest in conservation, come together to see and study natural resource problems on the ground and come to a better understanding of the thing as a whole.

"While men well informed in various phases of conservation will be at hand along the route to explain things, don't forget you are also participants on a give-and-take basis. Exchange your ideas and become well acquainted with each other.

"The Montana Conservation Council is not interested in taking sides on controversial issues—and there are many of them in conservation. Our aim is to give information as accurately and objectively as possible to aid you in developing informed opinions; to discover and strengthen fundamentals we can all agree on. Our only bias is that we believe wholeheartedly in conservation and that we must somehow get together on the wise use of our natural resources."

The second day of the tour was from Missoula to Thompson Falls. It covered a visit to the National Bison Range, the Flathead Indian Agency, a stop at the projected Paradise Dam site to discuss water conservation matters, and a Forest Service timber sale in Cherry Creek.

The third day to Libby, in the northwest corner of the state, took the group through the largest body of uncut timber in Montana. A State cutting was visited and the problems of sustained yield injected—a subject which was actively discussed for the next three days. The sawmill and wood preservation plant of the J. Neils Lumber Company at Libby were visited, with a special trip to the unique zonolite mine in the evening.

The fourth day was a drive up the beautiful Kootenai River and a kaleidoscope of timber, water, land

use problems and history. The day's program was conducted by Winton Weydemeyer, a leading producer of Christmas trees in the Eureka area, known as the "Christmas tree center of the world."

The next day included a visit to

#### **AFA COMMITTEE TO STUDY INSECTS AND DISEASE**

**Creation of a national advisory committee to recommend a program of long-range research and control of forest insects and disease was approved by the Board of Directors of The American Forestry Association on March 21.**

**Named to this committee were Thomas J. Page, agricultural director of WNBC, New York, chairman; Representative John McSweeney of Ohio; Clyde S. Martin, chief of forestry relations, Weyerhaeuser Timber Company; Fairfield Osborn of the Conservation Foundation; Stanley Fontanna, state forester of Michigan; Dr. J. S. Boyce, forest pathologist, Yale University; Dr. K. Starr Chester, Battelle Memorial Institute, Ohio; and M. H. Collett, West Virginia Pulp and Paper Co.**

**The Association's long-range program for American Forestry, adopted in 1947 after a nationwide appraisal of forest conditions, recommended more intensive research and control of both insects and disease. The survey revealed these destructive forces as taking a greater toll of American forest wealth than fire.**

**Initiation of the project culminates a period of preliminary study by Chairman Page, S. L. Frost, AFA's executive director, and government and industrial leaders.**

the great Hungry Horse Dam in the making, agriculture in the upper Flathead Valley, described by County Agent Walt Mauritsen, the Flathead sweet cherry industry, a branch of the Montana Agricultural Experiment Station, the biological station of the University of Montana on Flathead Lake, followed by a lakeside fish fry put on by the Flathead Wildlife Association.

The sixth day, to Polson and back to Missoula, was arranged and led by Norin Johnson of the Soil Conservation Service. It covered a demonstration of various agricultural practices, soil types, sprinkler irrigation systems, land drainage and leveling, the Ronan cheese factory and the Ninepipe Bird Refuge. It was no accident that the tour opened and closed with emphasis on the fundamental importance of the land and its management.

Two things in particular contributed to the success of the trip—enthusiastic participation and group traveling. In addition to the caravan members, sixty-one local people took an active part in discussions and descriptions. Many more local people met the caravan and a number of them traveled with it for a day or so. The effort was to contact as many groups as possible along the way, and this was done. Traveling together in a bus engendered a group spirit and understanding that could not have been developed in separate cars.

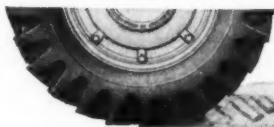
All participants were enthusiastic over the value of the caravan and felt the trips should be continued. For many, the state was viewed in a new light. A common remark was, "I've been through this country before but have never really *seen* it until now." A feature of the trip was the constant evidence of close and mutually beneficial relations between public service technicians and landowners.

Plans are already well along for a 1950 tour in eastern Montana, starting from Miles City. Floyd Larson of the Bureau of Land Management at Billings, is chairman of a strong committee for the 1950 caravan. Conservationists from the eastern part of the state are eager—and insistent—that people get a better understanding of the problems of the open country. Montana is a big state, 750 by 350 miles, and three or four tours in successive years are planned to cover its various parts.

The Conservation Council is on its way to becoming an active force in Montana. It offers a meeting ground for all groups interested in conservation and should be particularly effective in conservation education, its primary interest. The caravan idea of bringing together diverse groups for an extended study tour of natural resource management as a whole has shown vitality. The work of the Conservation Education Committee, headed by Dr. Harold Tascher of Montana State University, has made equally active progress in stimulating interest in conservation education in the schools.



# HERE, **SOFT GOING** demands **INTERNATIONAL** **"POWER ON WHEELS"**



The Smith & Adams Lumber Co., Summerville, S. C., found that International wheel tractors are the solution to the problem of hauling logs over a slab-and-sawdust road through swamps. With aircraft wheels and tires up front and logs in wheeled carriers, behind, the ID-6 tractors travel the three-quarter-mile swamp trail to the mill easily and economically.

"The tractors do more work than ten mules," says owner C. K. Adams.

"I really like these ID-6's. They are doing a fine job for me." Easy to handle, economical International "Power on Wheels" pays dividends to owners.

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## **INTERNATIONAL INDUSTRIAL POWER**

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## Ten Most Influential Men in Forestry

(From page 11)

Agriculture of Nebraska in 1872, he introduced a resolution that April 10 be set apart and concentrated to tree planting, that it be named Arbor Day.

Thus Arbor Day, now observed annually in all the states and dependencies of the United States and in many foreign countries, launched the greatest tree planting movement the world has ever known. Since its inception, Arbor Day has provided the impetus not alone for the reforestation of woodlands, but for the beautification of school grounds, parks and highways, and the general improvements of America's towns and cities through the planting of shade trees.

No single phase of conservation has so captured popular acclaim as Arbor Day. Scarcely a boy or girl exists throughout the land who has not participated in a school or community tree planting ceremony.

**Pioneer Forester** — America's first professional forester was Bernhard E. Fernow (1851-1923), a German national, who arrived in the United States in 1876 and became a citizen. As chief of the U. S. Department of Agriculture's Division of Forestry, the forerunner of the present Forest Service, during the formative period from 1886 to 1898, he notably influenced the government's policies in respect to the acquisition of federal forests. It was during his administration as chief of the Division of Forestry that Congress, in 1891, passed what Gifford Pinchot was later to designate as "the most important legislation in the history of forestry in America. It authorized the creation of forest reserves, the origin and foundation of our present national forest system. Subsequently, in 1898, Dr. Fernow became head of forestry instruction at Cornell University, the first institution in the New World to train men for the practice of forestry as a profession. In addition, he greatly influenced the literature of forestry as editor of the *Forestry Quarterly* which he founded at Ithaca in 1902, the first technical forestry periodical in the Western Hemisphere.

Thus as government official, professional educator and technical editor, he exercised an influence over the early development of forestry that has been as beneficial as it has been lasting. At his death in 1919, Colonel W. B. Greeley called Dr. Fernow "the pioneer forester in the United States."

**Publicist and Lecturer**—Joseph T. Rothrock (1839-1922), whose

memory is now revered as the "Father of Forestry" in Pennsylvania, did the kind of ground-breaking on the state level that Dr. Fernow so effectively initiated nationally. Dr. Rothrock was a physician and botanist. During travel and study in Germany, he became so impressed by the well-managed forests there that he determined to devote his life to restoring Penn's Woods, his native state.

As founder and first president of the Pennsylvania Forestry Association, organized in 1886, he carried on a campaign of public education in conservation which set a pattern not only for forestry in the Keystone State, but in other states as well.

To be sure, many individuals contributed to the growth of the state forestry movement during the 1890's and early 1900's, but Dr. Rothrock's career epitomizes the efforts of that small but growing group of ardent conservationists who awakened public opinion in that era. His role was that of initiator and leader of a popular movement, but he realized the coming need for technical education. In 1903, through his foresight was founded the Pennsylvania State Forest Academy at Mont Alto, the first state technical school operated solely to provide trained foresters to manage the state forests.

Not a professional forester himself, Dr. Rothrock was pre-eminently a lecturer and publicist, whose influence it still felt in states where forestry is a function of state government.

**Inspiring Teacher** — Filibert Roth (1858-1925) was considered by foresters and educators competent to

Of the ten men nominated by Mr. Clepper for outstanding roles in the development of American forestry, two—J. Sterling Morton and Henry S. Graves—served as president of The American Forestry Association.

Bernhard E. Fernow was one of the organizers of the Association and for fifteen years secretary and chairman of its executive committee.

William B. Greeley has been a member of its Board since 1915. Ovid Butler served for twenty-five years as Executive Director and Editor.

judge one of the greatest teachers the forestry profession has known. By those who knew him well, he was a born teacher with a lively imagination, unexcelled in his ability for conveying ideas by word pictures, and possessed of a sympathetic understanding of the men who worked and lived in the woods.

Born in Germany, he came to America at the age of thirteen. Graduated in arts and science at the University of Michigan, he joined Dr. Fernow in Washington, D. C., in 1890, in the old Division of Forestry. Under Dr. Fernow he received his only technical training, and went with him to Cornell. After brief service, beginning in 1901, as superintendent of national forest reserves in the General Land Office of the Department of the Interior, he returned to the University of Michigan in 1903 as a professor in the Department of Forestry.

Although during his productive career Dr. Roth was the author of numerous bulletins and other writings on forestry, and served for years as an advisor to the State of Michigan on forestry matters, it is in the realm of teaching that he made his impress on forestry in America. Affectionately known as Daddy Roth, he swayed and influenced students as no other teacher of his time—or perhaps since—has done. Forestry has not lacked for good teachers, but none was greater than he.

**"G. P."**—Gifford Pinchot (1865-1946) was the first native American to become a professional forester. On graduating from Yale in 1889, he studied at the French forestry school at Nancy. His forestry career began in 1892 with the first systematic forest management in America at Biltmore, North Carolina, and in 1898 he was appointed forester and chief of division, afterwards Bureau of Forestry, now the Forest Service of the Department of Agriculture. As chief forester, until he was removed by President Taft in 1910, he was responsible for the national forest system as we know it today and for the establishment of national forest policies. He was founder and first president of the Society of American Foresters, organized in his office in 1900.

During the period from 1920 to 1922, he was commissioner of forestry in Pennsylvania, and governor from 1923 to 1927 and from 1931 to 1935.

Through his force of personality  
(Turn to page 37)





How this birch hangs on, after erosion, shows its ability to meet new problems

# The Intelligence of Trees

How trees, under pressure, make unusual adjustments to survive is not fully explained by science in the opinion of this writer

By HENRY S. CURTIS

TREES manifest at times a power of adaptation that is almost akin to intelligence. Probably many of us have noticed at some time, somewhere along a country road that has been cut through a ridge, a tree growing at the edge of a bank that was gradually being washed or dug away. I have seen an oak tree twelve or fourteen inches in diameter held out five or six feet over the edge of such a bank by a root that has grown to nearly the thickness of the trunk itself.

There is a group of elm trees which has been undermined by the Huron River. As there was nothing for them to hold to on the river side, the roots from that side have turned about and gone back into the bank. I wonder how they knew what to do.

I have been watching also a large willow tree which is rotting away at the base. It must soon have succumbed to the force of the wind unless it devised some plan, so it has sent down three roots from the live portion, some five feet up the stem, to cover and strengthen the trunk on the rotting side.

We may regard the banyan tree with the props it puts under its wide-extended branches as something of a freak, but it is really using a very clever device which almost any tree might employ under similar circumstances. The banyan has an enormous spread of branches running out

to a hundred feet or more. It could not support these branches without the air roots that it sends down, but by this means it is enabled to take possession of a wide area lying about it and keep off all competitors. We usually think of this as a special invention of the banyan, but it is far from being so.

In the Hawaiian Islands, the winds come in from the Pacific charged with vapor. When these tropical winds strike the cold mountainsides, the vapor condenses into a fog or falls in very frequent showers. As a result, the limbs of the trees become covered with moss sometimes a foot thick. This holds an enormous amount of water and these trees of various varieties have the same problem as the banyan—an enormous weight to support—and solve it in the same way by sending down roots from the branches.

In parts of the Mohave Desert of Southern California, there is almost no vegetation except the mesquite bushes. Theirs is a hard lot, as they have to get along with four or five inches of rainfall a year and some years with none at all. The fine sand drifts up about them and often buries them almost to the top. As the limbs are buried, they turn into roots and imbed themselves firmly in the drifting sand.

Then, with the years, the wind currents may change again and blow

away the sand that has accumulated around these lower branches, and a second adaptation becomes necessary. To meet the situation, the branches, which have now become regular roots, change back again into branches.

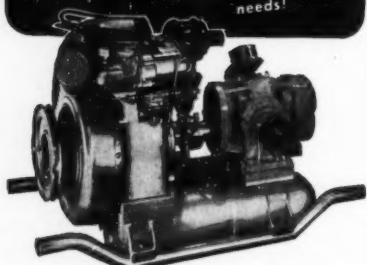
When a tree is growing in the forest, it is protected from the sweep of the wind by the surrounding trees, but when these trees are cut away, its great height gives the wind a tremendous leverage against it, and it protects itself by strengthening its root system on every side.

The tree that grows in the open does not grow tall like a forest tree because it does not need to reach up for the sun; but the trees that I have noticed growing by themselves are short and have a root system that gives them an almost solid base of heavy roots reaching out on every side.

Of course I do not mean that trees actually have brains, but that under various unusual circumstances they are often able to adjust themselves to conditions as though they were gifted with intelligence. It has been attempted to explain these adjustments by chemical reaction and geotropism; but this is merely an attempt to explain a mystery by giving it a scientific name. It still leaves us the problem: Why do chemical reaction and geotropism act in this way under these unusual circumstances?

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## NEWS IN REVIEW

**Effective July 1**, North Carolina State College will have a fully accredited School of Forestry on its Raleigh campus, according to Chancellor J. W. Harrelson. The college's Division of Forestry is already one of five accredited forestry institutions in the South and one of twenty-one such schools in the nation.

Under the new status, both graduate and undergraduate degrees in forest management and in three fields of wood utilization—wood technology, pulp technology and lumber products merchandising—will be offered. The Division has the largest outdoor forest laboratory in the world—the 80,000-acre Hofmann Forest in Jones and Onslow Counties which was bought and maintained for the use of the division by the North Carolina Forestry Foundation.

Meanwhile, **Yale University** is taking another progressive step in conservation education by establishing, in cooperation with The Conservation Foundation, a graduate program of research and instruction in conservation of natural resources. The Connecticut River Valley, which has been described as an outstanding example of both good and bad conservation practices, will serve as the outdoor classroom for students, when the course begins next September. The course will require two years of study and research and will lead to a master's degree in conservation.

The University of Michigan has been giving a similar degree for some time, and will soon strengthen its conservation work through a grant from the Charles Lathrop Pack Forestry Foundation.

**Michigan State College**, too, is giving conservation new stress by organizing a Division of Conservation. President John Hannah has announced that Professor Paul A. Herbert, head of the Department of Forestry since 1931, has been named as director of the new division. Herbert will direct four departments, consisting of the Conservation Institute, Fisheries and Wildlife, Forestry, and Wood Utilization. The new Division of Conservation, according to Herbert, will bring all the conservation activities into one unit and insure that all phases of the subject will receive proper and adequate attention.

**Pulp and paper companies**, with 425 professional foresters on their payrolls, are the largest employers of foresters in the South, according to F. C. Gregg of International Paper Company's Georgetown, South Carolina, division.

A new **U. S. Forest Service** position—general inspector—has been assigned to Charles L. Tebbe, director of the Northern Rocky Mountain Forest and Range Experiment Station at Missoula, Montana. Lyle F. Watts, Forest Service chief, stated in making the appointment that Tebbe will assume his new duties in the Washington office beginning July 1. Tebbe's new position was created through authority granted by the Secretary of Agriculture and in response to Congressional suggestions. He will make recommendations to improve the integration of national forest management, state and private forestry, and forest and range research work of the Forest Service. He will serve as the "eyes" of the chief and his staff.

The Northern Rocky Mountain Station directorship will be filled by Dr. George M. Jemison, who will be transferred from the Southeastern Forest Experiment Station at Asheville, North Carolina, where he is chief of the forest management division. He has been stationed at Asheville for the past thirteen years.

(Turn to page 34).



Charles L. Tebbe, now at Missoula, Montana, will on July 1 assume new duties as USFS general inspector

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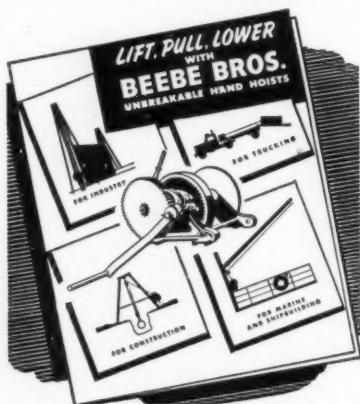


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## News in Review

(From page 32)

**Grazing permittees**, purchasers of timber and holders of other permits to use National Forest lands may now expect prompter service in appealing decisions of the chief of the U.S. Forest Service. Secretary of Agriculture Charles F. Brannan, in naming the membership of the new National Forest Advisory Board of Appeals, selected men from agencies within the Department other than the Forest Service. Previously, appeals were handled by members of the Secretary's staff, but the new arrangement meets the demands of permittees for a more formal method of handling appeals.

Chairman of the newly created Board is John C. Bagwell, chief of the Production and Adjustment Division in the Office of the Solicitor. Members include George R. Phillips, member of the staff in the Office of the Secretary of Agriculture, dealing with land and water use, management and conservation; Edward G. Grest, chief of the Land Management Division of the Soil Conservation Service; Dr. Stanley B. Fracker, Agricultural Research Coordinator; and John A. Goe, chief of the Wool Division, Livestock Branch, Production and Marketing Administration.

**The Western Pine Association** has named Ralph D. Hodges of Vancouver, Washington, to the post of district forest engineer for California. Formerly a forester in the Pacific Northwest, Hodges will now make his headquarters in Sacramento and will be available for consultation and advise on timber management problems.

**Elected president** of the American Pulpwood Association at its sixteenth annual meeting was J. E. McCaffrey of the International Paper Company's Georgetown, South Carolina division. (For more about McCaffrey, see "Neighborly Forestry" which appeared in the April issue.)

**Vice-presidents** elected were: M. H. Collet, West Virginia Pulp and Paper Company; E. O. Ehrhard, New York and Pennsylvania Company; and R. R. Drummond, Oxford Paper Company. H. E. Brinckerhoff was elected executive secretary-treasurer.

**The older American Paper and Pulp Association**—holding its seventy-

third annual meeting—also elected officers recently. George Olmsted, Jr., president of the S. D. Warren Company, Boston, Massachusetts, was named Association president, and Sydney Ferguson of the Mead Corporation, New York City, was elected vice-president. Earl W. Tinker, New York City, was re-elected executive secretary and treasurer.

**The Southern Pulpwood Conservation Association** has elected as its 1950 president R. W. Wortham, Jr., of the Southland Paper Mills, Lufkin, Texas. He succeeds E. J. Gaynor III of the Brunswick Pulp and Paper Company.

**Winners of the four** lumber industry summer scholarships for forestry school students have been announced by R. A. Colgan, Jr., executive vice-president of the National Lumber Manufacturers Association. They are John H. Brown of Michigan State College, East Lansing, Michigan; Craig C. Campbell, Duke University, Durham, North Carolina; Thomas A. Foley, Purdue University, Lafayette, Indiana; and Richard W. Pettersen, University of Washington, Seattle, Washington.

The winners, chosen from an outstanding group of twenty nominees, will receive ten weeks of summer research training in the Timber Engineering Company Laboratory, Washington, D. C. Competition for the scholarships was extremely close, and outstanding scholastic records were necessary to come out on top. For example John Brown has achieved the highest scholastic record ever attained by any undergraduate at Michigan State, not only in forestry, but in the history of the college. The other winners rivalled this standard of achievement.

**Southern Information and Education** chiefs have once more elected J. H. Kitchens, Jr., of the Louisiana Forestry Commission as their chairman. Kitchens has been an officer in the organization since its formation in 1946. W. S. Chambers of Florida was named vice-chairman, and Robert W. Shaw of North Carolina secretary.

**The California Redwood Association** has announced a plan to sponsor and certify tree farms in the redwood region. Certificates will be available to non-members as well as members, according to Otis R. John-



son, Association president. While the Association will have direct responsibility of certifying tree farms in the redwood region, it will work in close cooperation with the State Division of Forestry and other agencies.

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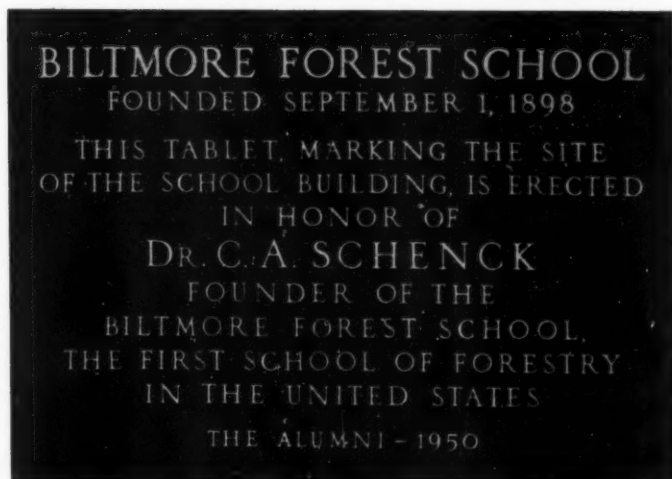
The recent critical water shortage in New York City prompted Minnesota's Governor Luther Youngdahl to call a Conference on Underground Waters to discuss all aspects of the state's water supply and how best to plan to avert any shortage in the coming years. Actually, Minnesota is superficially endowed with one of the most abundant supplies of water of all the states because of its heavy rainfall, but all of its streams flow

vention was set in Texas during 1949, according to a report originating from J. O. Burnside, fire control chief. Only 834 fires were logged in the protected East Texas area during last year, and the area burned amounted to 18,508 acres.

• • • • •

After forty years of service in a trade association, Royal S. Kellogg, retired as secretary-treasurer of the Newsprint Service Bureau on March 31. He was considered the dean of secretaries of the paper industry's many associations, and has been active in forestry since 1901. He had been secretary of the Newsprint Service Bureau since 1918, and prior to that had been connected successively

### Alumni to Honor Dr. Schenck



This is the bronze plaque which alumni of the now discontinued Biltmore Forestry School will unveil during their reunion May 27 through May 30 at Asheville, North Carolina, in honor of the school's founder and professor, Dr. C. A. Schenck. Many prominent foresters will attend.

out of the state and none flow in. Population growth and increased industrialization have placed a growing demand on supplies. No shortages are foreseeable in the near future, however.

• • • • •

Jack Rottier, former director of publicity for the Idaho Department of Forestry, has been appointed district manager for the Lake States field office which American Forest Products Industries has established in Milwaukee, Wisconsin. He is a former staff member of the Twin Falls, Idaho, *News-Times* and is a native of Michigan.

• • • • •

A new record in forest fire pre-

vention with the Northern Hemlock and Hardwood Association and with the National Lumber Manufacturers Association. He has been a member of The American Forestry Association for forty-eight years, was elected a member of the Society of American Foresters in 1905 and a Fellow of that organization in 1949.

• • • • •

Hugh W. Terhune, administrator of the Philippine Fishery program, will report to Washington, D. C. on July 1 to take over new duties as assistant chief of the Branch of Alaska Fisheries for the U.S. Fish and Wildlife Service, according to Interior Secretary Oscar L. Chapman.



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## Huge Appropriation Bill Reported to House

By Carl D. Shoemaker

The General Appropriations Bill (H. R. 7786), carrying more than \$27,250,000,000 for operation of the several departments of the government, was reported out of committee late in March and placed on the House Calendar for action.

This year Congress decided to change its approach to appropriations. Heretofore, each department of the government had its own appropriation bill.

The Department of the Interior has wrapped up in its package \$621,634,130, which is \$31,430,183 more than it had for the present fiscal year. The Bureau of Reclamation takes the biggest slice of this, \$325,108,000 or a decrease of \$31,645,510 from the current year; the Bureau of Land Management gets \$776,000 more this year for a total of \$7,356,800. The Fish and Wildlife Service receives \$14,375,500 in direct appropriations; in addition the bill appropriates all receipts from the sale of Duck Stamps, estimated to be \$4,000,000, and all those arising from the excise tax on sporting arms and ammunition under the Pittman-Robertson Act, estimated at \$8,500,000.

The National Park Service is given \$36,745,200, which represents an increase of \$6,995,250 over the present fiscal year. Better than \$500,000 of this is for forestry and fire control in the national park system; slightly over \$12,000,000 to continue work on six parkways and roads and trails in the park system.

The grand total of appropriations for the Forest Service in the Department of Agriculture is \$60,270,000, an increase of \$365,500 over the current year. National forest protection and management is allotted \$26,890,000, roads and trails \$10,348,000, forest fire cooperation \$9,500,000, fighting forest fires \$6,000,000, forest and range research and investi-

gations \$2,995,000, private forestry \$1,300,000, forest products research \$1,300,000 and the forest survey \$880,000. For the purchase of private lands in the recently established roadless and wilderness area in the Superior National Forest of Minnesota, the committee allowed \$150,000, an even 100 percent increase over the current year's allotment. The Soil Conservation Service gets \$56,290,000, a boost of \$2,996,700 over this year. Agriculture's Extension Service receives \$27,900,000, a decrease of \$102,450.

For the control of forest pests, the Department of Agriculture receives \$4,719,500, a decrease of \$500,500.

The Corps of Engineers has been given \$600,945,000 in this omnibus bill. Of this amount \$412,267,000 is for flood control work throughout the country, with nearly every state having one or more projects. The committee states that the estimated cost of all flood control measures on the Mississippi River and its tributaries alone is \$1,265,000,000. To date, \$786,107,424 has been appropriated and this bill carries \$65,000,000 more. Theoretically, at least, this job is about three quarters finished.

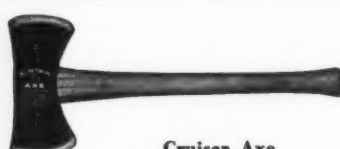
For Water Pollution Control Activities the committee allowed \$1,000,000 for grants to the states to develop research and projects and "recognizing the importance of the national water pollution problems and of certain other researches financed under this item the Committee feels constrained to allow an increase of \$600,000 over the current appropriation." This will give considerable impetus to the work of the Water Pollution Control Division of the Public Health Service, and marked results should be seen in this field before the 1951-52 appropriations come on for hearings next year.



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## Ten Most Influential Men

(From page 30)

and his aggressive leadership, Mr. Pinchot doubtless exercised a wider influence on the entire American conservation movement than any other individual.

**"T. R."** — Theodore Roosevelt (1858-1919), on becoming President in 1901, was quick to realize the political possibilities in the conservation movement then being championed forcefully by Gifford Pinchot and other conservationists, both inside and outside the federal government.

With characteristic energy and enthusiasm, T. R. made conservation a major and popular issue of the day. His first message to the Congress contained a criticism of the ridiculous situation then prevailing whereby the government's forests were in one department (Interior) and its foresters in another (Agriculture).

On February 1, 1905, he signed the act transferring the forest preserves, later to be designated national forests, from the Department of the Interior to the Department of Agriculture, thereby putting the management of the federal forests under the super-

vision of the government's foresters.

By 1905, some sixty million acres of national forests had been created in the West. By 1907, T. R., by proclamation, had increased the area to more than 100 million acres.

Another event of the utmost importance to the development of both national and state forestry policies occurred during his administration. This was the conference of governors held at the White House in 1908.

The first President to give personal leadership to conservation, T. R. gave the forestry movement a mark of prestige and importance which it had previously lacked and which henceforth was to make it a definite part of the American way of life.

**Foremost Educator**—Henry S. Graves (born 1871) was the second native American to become professionally educated as a forester. Following graduation from Yale College in 1892, he subsequently went to Harvard then to the University of Munich.

Appointed assistant chief of the old Division of Forestry in 1898, he re-

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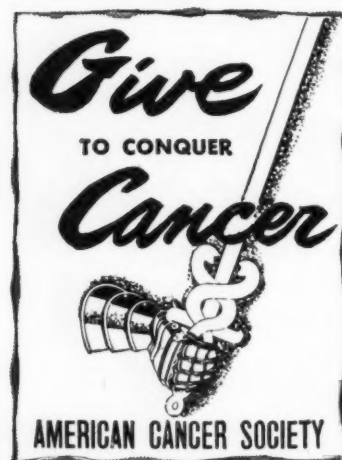
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signed two years later to become director of the Yale School of Forestry. He re-entered the Forest Service in 1910 as chief forester, which position he held for a decade except for military service during World War I as a lieutenant-colonel of engineers. Returning to Yale in 1922 as dean of forestry, he served until his retirement as dean emeritus in 1939.

The author of numerous periodical articles, bulletins and books on forestry and education, Dean Graves was responsible not alone for the development of the Yale School of Forestry as perhaps the outstanding—certainly the best known—forestry school in the world. But he exercised a marked influence on the high standards on which professional education in forestry was developed in other American colleges and universities. For Dean Graves entered professional education when it was first starting, and because of the sound development of the educational program at Yale—a program rapidly adopted by other institutions as they, too, began to offer technical training—forestry has earned a place for itself among the older recognized professions.

**Colonel Bill**—The career of William B. Greeley (born 1879), and its effect on American forestry, is of more than ordinary interest. Having reached the height of his profession by appointment to the most influential forestry position in government—chief of the U. S. Forest Service—he then resigned it to enter the industrial field; and in time became, and remains today, the forester exercising the greatest influence on private forestry policies.

An early graduate of the Yale School of Forestry, he entered the U. S. Forest Service in 1904. Promotion was so rapid that by 1911 he was assistant chief of the Service in

charge of national forest management at Washington, D. C.

During World War I he served in France with the A. E. F. in charge of the forestry section of the Corps of Engineers. On returning to the Forest Service he was appointed chief forester in 1920. The following eight years, under his administration, was an era of growth and expansion of forestry in America. During this period two significant pieces of legislation were enacted by Congress. These were the Clarke-McNary Law, providing for cooperation between the federal government and the states in fire control and tree planting, and the McNary-McSweeney Act, which established a field program of forestry research.

In 1928, Colonel Greeley left the government to become secretary-manager of the West Coast Lumbermen's Association, serving until 1946. He is now chairman of the board of American Forest Products Industries, Inc., which sponsors nationwide educational work in forestry as well as the tree farm system and the "Keep America Green" program.

The influence of these projects on the expansion of forest conservation and public knowledge about forestry is the most significant public relations activity ever undertaken by the forest products industries, and Colonel Greeley is its master strategist.

**Editor and Popularizer**—Ovid Butler (born 1880) started his career as a newspaper man but switched to forestry. Combining his talents for writing and editing with his forestry training, he successfully popularized forest conservation and in so doing gained friends for the cause from literally all walks of life.

On graduating from the Yale School of Forestry in 1907, he entered the U. S. Forest Service and served on western national forests until 1917, when he was appointed assistant director of the Forest Products Laboratory at Madison, Wisconsin. Five years later he left government service to become forester for The American Forestry Association, then its executive secretary, and subsequently executive director, and at the same time served as editor of the association's influential magazine, *American Forests*.

During a period of a quarter century, the association under his direction took a prominent, and frequently the leading part in every important battle for conservation. In the pro-

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motion of federal and state legislation for adequate forest fire control, in the forefront of numerous fights to preserve the national forests and national parks from exploitation, in the enlistment of popular support for hundreds of worthy conservation causes, The American Forestry Association was the army of the right and Ovid Butler its tireless chief of staff.

As much as any man of our time, he helped make conservation a household word, and forestry a familiar and useful concept.

"F. D. R."—Franklin D. Roosevelt (1882-1945) gave the whole conservation movement, including forestry, its greatest impetus since Theodore Roosevelt's administration.

A tree planter on a large scale, the Squire of Hyde Park knew much about reforestation before becoming governor of New York, and helped initiate the Empire State's splendid conservation program.

But it was on becoming President in 1933 that F. D. R. was really in a position to do something about conservation. With millions of unemployed and great areas of wasted natural resources demanding attention, he launched the Civilian Conservation Corps. Idle manpower was put to work restoring forests, soils, water and wildlife, the greatest cooperative undertaking of its kind in history.

The Soil Conservation Service was a development which became a reality under his approval. Another of his interests was the Joint Congressional Committee on Forestry which he had recommended to Congress.

In brief, F. D. R.'s contributions to forestry and the impact of his personality on conservation progress are so well known, that it is hardly conceivable that any reader will challenge his place as the last, but certainly not the least, of the ten most influential men in American forestry.

### Industry Fights Oak Wilt

A newly-formed National Oak Wilt Research Committee, headed by Leonard R. Steidel, cooperage manufacturer of Memphis, Tennessee, has been set up by industries which depend on oak timber as a raw material. The committee will assist and work with federal forest pathologists in a survey of oak wilt damage which will be conducted this spring and summer. Dr. T. W. Bretz, field representative of the division of pathology, will direct the survey. He is currently stationed at the University of Missouri, in the heart of one of the six states where oak wilt is prevalent.

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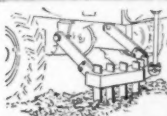
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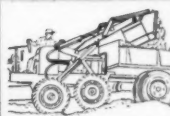
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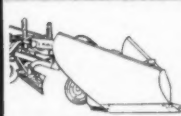
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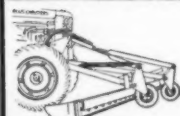
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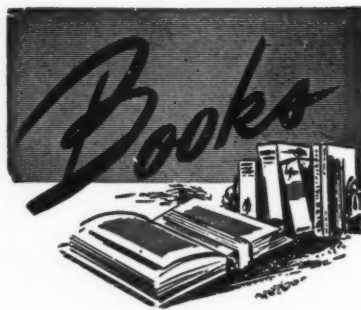
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Because it is an outstanding work, a must in every fisherman's library, *American Forests* this month offers its readers a 10 percent discount on all copies of *The Fisherman's Encyclopedia*, by Ira N. Gabrielson and Francesca Lamonte (reviewed below), ordered through the Editor.

THE FISHERMAN'S ENCYCLOPEDIA, by Ira N. Gabrielson and Francesca Lamonte. Published by Stackpole & Heck, Inc., Harrisburg, Pennsylvania. 698 pages, illustrated. Price, \$12.50.

Corey Ford in the foreword to this book says: "Here it all is: everything that every fisherman ever needs to know about fishing."

Replete with hundreds of illustrations, four-color plates of fish of every description, chuck full of how-to-do, where-to-go, what-to-use, this is *The* book for the nimrod. It will tide him through long winter days with enjoyable, profitable reading, or help

set him in motion with rod and reel on salt or inland water exploits.

The book represents the combined efforts of many authorities across the land organized by the editors into such categories as game fish descriptions, fishing equipment and methods, craft for fishing, fishery management methods, where to fish, when and how to fish, and a section of many miscellaneous topics including fly tying, photography for fishermen, fishing and casting contests, fish cookery, camping, pack-horse trips, glossary, etc.

As Mr. Ford warns, it would be disastrous to drop this book overboard. The fish would know as much as the fisherman!

THE MANAGEMENT OF FARM WOODLANDS, by Cedric H. Guise. Published by McGraw-Hill Book Company, Inc., New York, N. Y. 356 pages, illus. Price, \$4.00.

This is a new edition of a top-ranking book dealing comprehensively with the economic, biologic and technical relationships involved in growing, harvesting and managing farm forests for continuous production. It is applicable also to forest estates, community forests and other forms of non-commercial forest lands.

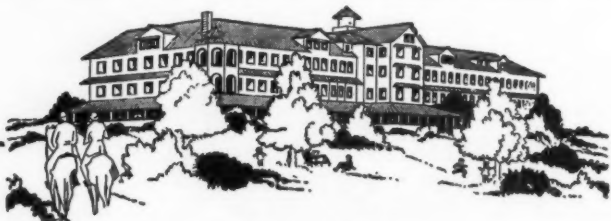
The same general outline used in the first edition has again been followed, but statistical material, subject to obsolescence, has been almost entirely omitted. New volume tables on determination of trees and stands are included and the author presents a more comprehensive treatment of intermediate cuttings. There is new material on species for use, spacing, reforestation by machines, growth and Christmas tree plantings.

THE CASCADES—MOUNTAINS OF THE PACIFIC NORTHWEST, edited by Roderick Peattie. Published by the Vanguard Press, New York, N. Y. 417 pages, illus. Price, \$5.00.

An intimate look into this dramatic mountain range of the Pacific Northwest, dominated by 14,408-foot Mt. Rainier and kindred peaks. Editor Peattie has called upon both writers and seasoned mountaineers to tell the Cascade story—and his good judgment speaks from every page of this refreshing and beautiful volume.

THE VALLEY OF FLOWERS, by Frank S. Smythe. Published by W. W. Norton and Company, Inc., New York City. 325 pages, illus. in color. Price, \$5.00.

An exciting chronicle of a famous English professional mountain climber who spent four months in the



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Himalayan Mountains studying the fabulous flowers to be found there. The author penetrated remote areas never before invaded by man and returned with highly interesting information on plant life in high altitudes. His color photographs are exceptionally beautiful.

**PLANT BUYERS GUIDE**, edited by Edwin F. Steffek. Published by Massachusetts Horticultural Society, Boston, Massachusetts. 260 pages. Price, \$7.50.

This new guide to seed and plant materials in the trade is the fifth and completely revised edition of Manning's "Plant Buyers Index." It is estimated the book lists over 20,000 plant names, excluding named hybrids of orchids, common flower and vegetable seeds, and named varieties of Spring-flowering bulbs. Included are several thousand species of native and exotic shrubs and trees. The plants are listed alphabetically by scientific name (based on "Standardized Plant Names") and keyed to sources as to seeds, plants and horticultural forms. The list of 441 sources, seedhouses and nurseries, is arranged alphabetically by firm names distributed in 43 states and 12 foreign countries. While the book is a "must have" for professional and amateur landscape gardeners, nurserymen and gardeners, it should prove

an invaluable directory for foresters, botanists and naturalists.

**YOU TOO CAN GROW A REDWOOD TREE!**, by W. Warren Anderson. Published by the Rare Plant Club, 208 McAllister Ave., Kentfield, California. 16 pages, illus. Price, 50 cents.

This booklet tells how to grow redwood trees in sections of the country other than California. It describes the redwood family with its thirty-six members and tells where to obtain four species for planting. There are photographs of two redwoods growing in eastern United States, each tree nearly 100 years old. Purpose of the booklet is to encourage experienced and amateur gardeners to grow this increasingly rare tree and thus insure its continued survival.

**MAN ON THE LANDSCAPE**, by Vernon Gill Carter. Published by National Wildlife Federation, Washington 10, D. C. 129 pages, illus. Price, \$1.50.

The author suggests how the younger generation may be made aware of the great part vegetation will play in its life and emphasizes how necessary plants are to the welfare of man. The book holds much promise as a text for students of conservation.

## Forest Practices on Private Lands

(From page 9)

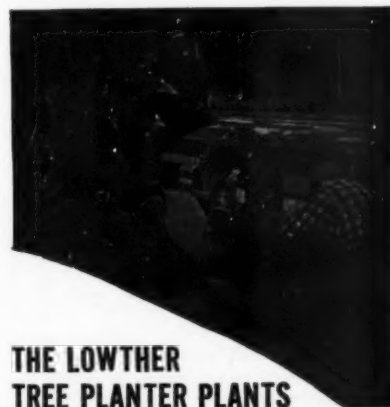
forestation of earth banks left in the wake of strip coal mining; and twenty-three million trees have been planted under this statute. Maryland has set up true local self-government in forest practice by giving the timber cutting rules of district committees the unequivocal legal backing of the state.

Many are the devices of other states to induce forest owners to grow trees; to get the horse up to the water trough without actually compelling him to drink. Four states offer substantial concessions in taxes, in return for growing trees. Louisiana has 750,000 acres under reforestation contracts; Minnesota has 172,000 acres of "auxiliary forests"; and Missouri, 97,378 acres of "forest crop lands." The contracting owner in each of these states gets the benefit of a very low and fixed land tax together with a graduated yield tax on future fellings.

The most forceful stroke of any state to grow trees by use of the tax-

ing power was that of New Hampshire during the past year. Under the fighting leadership of Governor Sherman Adams, the legislature put the major tax on all forest lands on the yield basis. But an owner who complies with the cutting rules of his local committee pays a yield tax of seven percent instead of the standard ten percent. This is the most clearcut tax reward for forestry offered anywhere in the United States. No shrewd Yankee need bite this dollar or turn it over to see what is on the other side.

New York offers no cut in taxes but leads all the states in the technical aids given to owners who comply with the local forest code. The co-operator receives help from the state on any woodland problem, timber marking, marketing assistance and planting stock—all free. California has an almost complete system of local forest government. A district committee draws up forest cutting rules. All woodland owners in the district vote on them. When ap-



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proved by two thirds of the forest acreage and by the State Board of Forestry, they go into effect. The catch is that the law has no teeth. There is no means of legal enforcement. But three fourths of the current logging complies with the committee rules.

And then Massachusetts. As Daniel Webster said, "There she stands," with one of the most unique and educational schemes of them all. No owner can cut over 40,000 feet of timber a year in Massachusetts without notifying the state and obtaining its recommended cutting plan. Thereafter, he may cut as he jolly well pleases. The "know-how" of good forestry is compulsory, but the swing of the ax is voluntary.

In this democratic fashion, by local initiative and resourcefulness, state after state is shaping the forest policy of America. The roads taken by all of these states lead to the same end. Whether the starting point is forestry by tax concessions, by self-government under local committees, or by statutory rules, the pay-off will be forestry by the free choice of informed men. Education is the marker on every milepost.

In recent years, the teaching of good woodlot management has been greatly strengthened by another incentive, very typical of the American way of doing things. It is the commercial interest of wood-consuming industries in future supplies of raw material. A pulp company on the Olympic Peninsula of Washington has covered the territory from which it draws wood with an illustrated circular on its buying program. It will take wood from second-growth stands of Douglasfir, under seventy years of age, only on a thinning of not more than thirty percent of the volume. And it offers free marking service to any supplier. Hundreds of pulp and lumber companies are doing this sort of thing.

The Southern Pulpwood Conservation Association has conducted a splendidly organized program of this kind since 1939. Including its member companies, twenty-four conservation foresters are at work, educating southern landowners to grow pines and distributing ten to twelve million trees among them every year. A like organization in the North, "Trees for Tomorrow," is promoting neighborhood forestry in Wisconsin and conducting a far-sighted educational program of forestry scholarships and school forests.

American Forest Products Industries, Inc., has extended "Tree Farms" to twenty-five states and twenty mil-

lion acres. Its "Trees for America" has been organized in five states. The many movements of differing origins, but a common tree-growing purpose, that have sprung to life since the start of World War II would make it seem that some wholesome virus is at work in the bloodstream of this country. There is the New England Forestry Foundation, now employing ten foresters and maintaining eight management centers. Down in Texas, the Independent Pulpwood Producers, Inc., have organized to convince contractors and landowners together that they should quit killing the goose which lays golden eggs.

Doubtless the most persuasive teacher in all of these schools of the woods is the forest-earned dollar. For many years, forest education in the United States had a hard, up-hill fight against the cold facts of supply and demand. But now the most powerful of all incentives in America is pulling with us. Woodland owners are learning fast the No. 1 theorem in the book, *It Pays to Grow Trees*.

It seems to me that the rational approach to forest practices on private lands is to work with the tide of education and initiative now running through our woodlands. Let us strengthen it and bring into it, as far as we can, a more complete fusion of public, industrial and local resources for education.

The spread of forest management now under way is admittedly ragged and uneven. There are gaps and duplications and misspent energies. The movement has no goose-stepping. It lacks the orderliness and precision of a Prussian forest regime. But it is full of vitality and the power of free energy. And it is getting results. Every year, it is making us a more forest-minded people. Every year, it is growing more trees.

It would be very short-sighted for the forest industries to assume they can now rest on their oars and drift on a favorable current. A great deal of hard work and leadership has been put into the spread of forest education; and they are still needed. One of the ancient Chinese sages left the world the proverb, "Preparation is the start of every human achievement." I would like to top that one with my favorite lines from Rudyard Kipling:

"If you want to win your battles  
 You've got to use your blooming  
 guns."

(Paper presented before the  
 Annual Meeting of the American  
 Pulpwood Association  
 February, 1950)



## Trout

(From page 19)

time I've used garden hackle and was darned glad to have it. Otherwise, I might have endured a meatless supper on many a Sierran pack trip. I knew, too, that the small larvae cut from goldenrod stems make ideal trout bait. I knew this to perfection, but Paul didn't know I knew, which to all intent and purpose was tantamount to my not knowing.

"Keep his head up!" Paul was saying, just as he did when you started this story. "He's the best yet, and I think he'll win that steak for me."

I had purposely gone on upstream well above Paul so that he would not be on hand to see me dunk the borrowed worms. But, somehow, he had caught up just at the moment I hooked onto the brownie.

More than 26 million people made use of recreational resources on the national forests during 1949, an all-time record according to the U. S. Forest Service.

"Keep 'er tight!" he coached from the sidelines, as the fish headed out again from his nearly stranded flight. How a trout managed to find sufficient depth to allow for swimming in this ankle-deep water was no small amazement. With the infrequent exception of a small hole or an undercut bank, the stream was nowhere the kind that slops over knee-length boots.

Ten lunges and two minutes later, I leaned over and slid a finger through the gill covering of one of the most beautiful German browns I had ever seen. I did this, knowing full well that the trout was not going to be returned as were the smaller ones Paul had caught. This particular trout was breakfast, and I knew it—breakfast for the wife and son, too. It would have tipped the scales at three pounds, and then some.

"I'll be hornswaggled," was about all I could muster up at that point. "Who would have believed it?"

"Isn't this the sweetest steak you ever sank a tooth into?" Paul was asking in a way that made you know he wanted more than a "yes" or "no" answer.

"Sweet my eye!" I growled, retrieving a dollar and fifteen cents change from the ten-spot I had handed the waiter. "We wouldn't even call this baby heifer a chop out West"—a westerner to the bitter end.

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## CVA

(From page 17)

their underlings hired without benefit of civil service as to qualifications. Few can be so naive as not to realize that the dominant economic and social thinking which proposes this kind of legislation would be rampant within the CVA itself.

Timber growing in the Pacific Northwest has now reached the point where it is a legitimate investment for private capital. Timber harvesting has taken a turn from the old cut-out-and-get-out days of the exploitive era. And now, just when industry is pushing voluntary "Tree Farm" programs, "Keep Green" campaigns, and "More Trees" projects, when industry and the states have perfected fire prevention, detection and control systems, when big industry in the Northwest is leading the government for the first time in its actual on-the-ground man-

agement practices, and state and industry-supported nurseries are reforesting the old burns and understocked areas, along comes a proposal which would kill all state and private initiative.

Proponents of the CVA bills ridicule the idea that they provide the basis for the spread of state socialism. There is but one answer to this: write to your Congressman or to the Senate Document Clerk for a copy of Senate Bill 1645, or to the House Document Clerk for House Bills 4286 or 4287, and read them yourself. And read them *carefully!* The authors of the bills have not stated the powers of the proposed CVA under one section where they can be readily seen and understood; these powers are very cleverly scattered throughout the confusing text.

## Pellet Seeding

(From page 25)

verity of drought restricting growth.

Sixteen months after planting, a sampling of 448 random plots revealed an average of seventy-five plants of Lehmann lovegrass an acre on an area which had been sown at the rate of about 200,000 seeds to the acre. The plants found, however, had become established and had produced seed. It was also discovered that plants germinating on barren, slick soils soon disappeared.

Papago Agency technicians recommended that additional seeding in that area should be accompanied by these precautions: (1) soil preparations should precede seeding in order to retain sufficient moisture to maintain plants once established; (2) time of distribution of seed must be coordinated with the local precipitation pattern; (3) areas seeded must be under range management to give protection to newly established plants.

Mid-August to mid-October was the period selected for aerial seeding of a 20,000-acre area in the San Carlos reservation with a mixture of 1650 pounds of sand dropseed, 800 pounds of Lehmann lovegrass and fifty pounds of weeping lovegrass. A year later, technicians failed to find a single specimen in the area.

In addition, twenty-eight acres were quadruple disced and drilled with pellets of Lehmann lovegrass and weeping lovegrass at an approximate depth of one-half inch. This

was done in early August, and by October a few scattered patches of Lehmann lovegrass were found. Though the stand was poor and spotty, the plants produced seed before the first killing frost.

Airplane seeding of the Hopi and Navajo reservations was completed in four phases. In the first, 10,000 acres were seeded with crested and western wheat in October and November of 1946; in the second, 10,000 acres were planted to crested wheat and sand dropseed in May and June, 1947. The area was examined for results in October of 1948, by a group of representatives from the Department of the Interior. A report on the examination, prepared by Warren V. Turner, contained the following comments:

"The results cannot be considered even partially satisfactory. A scattering of crested wheat grass was found in a part of the area, most of these plants being noted within clumps of the native galleta grass. This would indicate that the falling seed may have lodged in the base of the already growing galleta clump and germinated and developed under this protection. Few specimens appeared to have established themselves on a bare ground surface."

The third phase seeded 24,000 acres between late October and mid-December of 1947, while some un-pelletized seed was planted during the first week of January, 1948, on deep

snow. The fourth phase seeded 16,000 acres during June and July of 1948. The areas were seeded by pellets containing varying amounts of crested wheat, smooth brome, sweet clover and timothy.

Sweet clover and timothy were observed during the summer of 1948 around the air strip used by the plane, the concentration of seed having been greater there. Some of the timothy produced seed in the fall. Apparently none of the seed thrived on open ground.

While it was considered too early to draw reliable conclusions, the preliminary opinions of Navajo technicians were that (1) the results from this operation are directly proportional to the amount of ground preparation, other factors being equal; (2) seeding with unpelletized seed gave approximately the same results as seeding with pelletized seed.

## Japan

(From page 24)

terest when he spoke of forestry, listened with the same critical attentiveness that characterizes good farmers the world over when a topic is brought up dealing with any phase of agriculture.

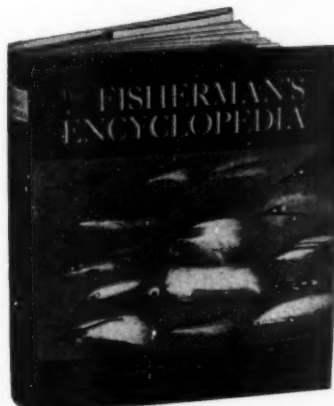
He hoped they were interested—and he believed they were. They had to be, that was all, in a country where practically all dwellings are wooden structures and where meagre supplies of coal necessitates use of wood for cooking, heating and industrial use. For Japan leans more heavily on its forest resources than most nations of the world.

It was raining as the train drew into the station and Fred could see a cluster of glistening umbrella tops huddled together, like mushrooms, on the station platform. That would be the reception committee. As the train stopped the umbrellas moved forward toward the coaches up ahead.

They wouldn't be expecting him in a boxcar, he told himself. He stood up in the doorway and shouted a greeting. The umbrellas changed their course, moved toward him. Faces materialized under the umbrellas and hands reached up to assist him down from the car. One Japanese shook his hand and then stood on tiptoe to hold an umbrella over his head.

Towering there, head and shoulders over the reception group, Fred smiled good humoredly as they chattered excitedly, mostly about the rain. Finally, he said amiably, "Well, let's go," and the little group moved off toward waiting vehicles. The people would be waiting at the farm.

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**How to Cut Costs and Make Money With Chain Saws**—36-page handbook, with nearly 150 photographs, telling story of chain saw. Henry Disston & Sons, Inc., Tacony 243, Philadelphia 35, Pennsylvania.

## AUTHORS

**JAMES B. CRAIG** (*Extension Forester in Japan*), associate editor of AMERICAN FORESTS up to April 1, is now manager of American Forest Products Industries, Inc., New York office. **KENNETH P. DAVIS** (*Conservation Caravan*) is professor of forest management, School of Forestry and Conservation, University of Michigan. **W. B. GREELEY** (*Rational Approach to Forest Practices on Private Lands*), one of the world's most distinguished foresters, was formerly chief of the U. S. Forest Service and, until semi-retirement a few years ago, secretary-manager of the West Coast Lumbermen's Association. He now devotes most of his time to educational activities. **A. G. HALL** (*What You Should Know About CVA*) is a forestry relations consultant, Washington, D. C. **F. WALLACE-TABER** (*Ankle Deep in Trout*), writer and wildlife management specialist, operates out of Denver, Colorado.

# This Month With The AFA

## AWARD NOMINATIONS ASKED

AFA's conservation awards committee has asked for nominations for this year's awards.

The awards are made to individuals who have shown outstanding service in forestry and related conservation and covering fields of public service, news, radio, education and industry.

Last year's awards were presented by AFA to Dr. Hugh Bennett of the Soil Conservation Service; Mr. M. D. Mobley of the Georgia State Department of Education; D. Clark Everest, Marathon Paper Company; Thomas J. Page, WNBC; Walter D. Humphrey, Fort Worth Press and Bryce C. Browning, Muskingum Watershed Conservancy District.

R. N. Hoskins, AFA awards committee chairman, has suggested that awards submitted carry complete biographical and supporting information, and be sent to AFA headquarters before July 15.

The 1950 awards will be presented at the annual meeting this fall.

**AFA's Board** at its March 20-21 meeting, acted on a number of legislative matters as follows:

(1) Went on record as opposing present bills now in Congress to reestablish the Civilian Conservation Corps on the ground that an emergency does not exist.

(2) Opposed H. R. 2419, authorizing expenditure of 10% of all receipts of each national forest in the development of national forest recreational and wildlife resources. While recognizing the need for development of these resources, the Board was not willing to see money allocated direct from revenues, believing expansion of such precedents undesirable, and favoring the principle of direct congressional appropriations.

(3) Opposed the passage of numerous river valley authority bills now in Congress until the entire problem of water policies has received further study.

(4) Accepted an invitation from Morris L. Cooke, chairman of Presi-

dent Truman's new Water Resources Commission, to furnish that committee with a statement on the Association's recommendations regarding national water policy and watershed management.

(5) Recognized the emergency conditions existing in national forests and parks in several western states due to insect infestations and urged Congress to provide adequate deficiency appropriations to permit government agencies to inaugurate effective control measures.

**In further business session,** AFA's Board approved plans to:

(1) Set up a national advisory committee on forest insects and diseases.

(2) Continue its conservation award project with a committee of Robert N. Hoskins, chairman. Representative Watkins M. Abbitt, Milton M. Bryan, Dr. M. D. Mobley, Fred Morrell and E. A. Norton.

(3) Hold a conference of state governors to study Ohio's Muskingum Watershed Conservancy District, and also prepare a brochure on the Muskingum. Last October, the Association dedicated the District as an outstanding example of watershed management on the state and local level.

(4) Consider changes in the Association By-Laws and appointed a committee of Karl T. Frederick, chairman, William B. Greeley, Samuel T. Dana, and Henry Clepper to make recommendations.

(5) Streamline the Association's accounting and operating systems.

(6) Hold the 1950 annual meeting in Wisconsin.

(7) Study ways and means of expanding Trail Riders of the Wilderness project.

**Marie E. Gaudette**, nature advisor for the Girl Scouts, has expressed her thanks to the AFA and others in the country who have helped with her tree program. She reports that 10,842 Tree Badges were obtained by Girl Scouts last year, a sizable increase over 1948. The awards are to girls from ten through thirteen years of age.

**The Ohio Forestry Association** has a bang-up program under way in the Buckeye State. It was our pleasure to meet with OFA's board of

governors at Columbus recently. Eighteen of twenty of the board were present—indicative of the enthusiasm with which that group is tackling its work. They have more projects under way or ready to go than you can count on the fingers of both hands. Horatio Ford of Cleveland, is president. Bill Laybourne is executive secretary.

**New Life Members** whom we welcome to AFA this month are: Dr. Arthur J. Harrington of New York, August F. Smith of Indiana, B. W. O'Donnell of Missouri, Mrs. H. O. Berger of Illinois, F. B. Wells of Minnesota, DeWitt E. Tallyn of Illinois, John E. Kuser of New Jersey, Mrs. R. G. Kennelly of Massachusetts, Mrs. James S. Dennis of Vermont, Miss Bogardus Brodt of California, and William Kaltenbacher of Pennsylvania.

**Newest member** of AFA's staff is Harold W. Williams, who comes to the Association as accountant in Business Manager Don Farver's department.

**The AFA regrets** to announce that James B. Craig has resigned as associate editor of *American Forests* magazine to take a position as manager of the New York bureau of American Forest Products Industries. Jim's last official act before terminating his service here was to write "An Extension Forester in Japan," which begins on page 22 of this issue. A product of Akron, Ohio, and Cumberland, Maryland, newspapers, he came to the AFA as an assistant editor in August, 1947, and was named associate editor last December. Even though Jim will no longer be with the AFA, we are glad he will continue to work for conservation. We wish him God Speed. S. L. F.



James B. Craig

# EDITORIAL

## Citizens At Work

If the free enterprise approach in forestry is failing in this country, as some have persuaded themselves to believe, the news has been slow in reaching Calloway County, Kentucky. For just recently 2,000 Calloway farmers, timberland owners, businessmen and other enthusiastic citizens, along with high-ranking state and government officials, gathered at Murray State College to celebrate an outstanding achievement for private initiative and local action—the planting of the two millionth tree in a county-wide program, and the two hundred millionth in the Tennessee Valley.

Officially dedicated to forestry progress in this tree-conscious Tennessee Valley county, the celebration was eloquent testimony for the workability of the free enterprise formula—salesmanship, individual initiative and teamwork. Working with the 750 farmers who voluntarily carried the tree planting ball were the Kentucky Division of Forestry, the County Extension Service and the Tennessee Valley Authority. And what this cooperative action has achieved in restoring Calloway's idle and eroded lands, in extending sound management practices to existing timberlands and in bringing greater areas of forest under fire protection could well reflect what is ahead for other sections in the region.

For as the distinguished forester W. B. Greeley so graphically points out in his article *A Rational Approach to Forest Practices on Private Lands*, found elsewhere in this issue, "The tide of education and initiative is now running through our woodlands . . . we are much farther along in spreading good forestry practices by education at the grass roots than most of us realize."

## We Can Share Knowledge

A new and far-reaching phase in the reconstruction of war-devastated countries is now developing under the guiding hand of CARE (Cooperative for American Remittance to Europe, Inc.), the non-profit organization through which many thousands of Americans have contributed to help restore the health and energy of the peoples of Europe and Asia. Up until now, the primary need of these peoples has been food and clothing. CARE's new program is directed toward the relief of mental famine—to help nations along the road to educational and cultural reconstruction.

Basic tools for this essential effort are books—particularly books that transmit scientific and technical advances, the kind of knowledge that is of immediate and practical value in reconstruction. The supply of books has never been adequate—the world has never had enough of them. And this shortage is made chaotic by staggering losses during the war. In Europe, particularly, war demolished thousands of schools and libraries, destroying millions of volumes.

CARE's book program is designed to help restore this tragic loss, to help fill current needs of universities, libraries, scientific institutions and other educational centers in as many countries as possible. As with its program for food and clothing, books will be purchased by CARE (this is preferred) with funds contributed by the American people.

The American Forestry Association is giving its active

support to this highly essential program and, in cooperation with CARE and the forestry schools of the country, is spearheading a drive to replenish damaged forestry libraries while assisting those unable, because of economic reasons, to keep abreast of scientific and technical developments.

Having established this fact in Calloway County, the forces of private initiative and cooperative action are now at work in other counties. The ultimate goal is to achieve full resource development for the entire Tennessee watershed. And, realistically, this long-range program is being presented to citizens on the basis of self-interest and community stability. With a million acres of now idle land restored to productivity, with existing timberlands scientifically managed to grow more and better trees, and with fire damage held to a negligible minimum, regional economists estimate the current \$200,000,000 annual income of the region can be increased to \$900,000,000—that forest industries eventually can employ 200,000 rather than 43,000.

It should be clear by now, we believe, that the American people, when adequately and intelligently informed, will support sound conservation programs, particularly at the grass roots level. Evidence of this is plainly written in the success of local soil conservation groups. But if the free enterprise system in solving our forest and other conservation problems is to operate as effectively as we believe it can, we must go beyond this. We must develop practical working alliances between the people, their conservation agencies and groups and their state and federal governments. Calloway County has graphically demonstrated how fruitful this can be—conceivably for the entire Tennessee Valley. And the challenge is one that lies at the doorstep of every community, every county and every forest region of the nation.

Committees of students at Alabama Polytechnic Institute, Duke University, the University of Maine, the University of Michigan, the University of Missouri and the University of Washington already have special fund-raising projects under way. The Forestry Club of the University of West Virginia has completed its donation for books to be deposited at the Justus Liebig College of Agriculture at Giessen, American Zone, Germany.

Donors, however, are not restricted to forestry schools or forestry students. Members of The American Forestry Association are invited to contribute to this program—to have a part in developing a closer understanding and more lasting friendship between forestry interests of the world. Contributions should be made through The American Forestry Association—and those whose gifts are \$10 or more will receive a receipt signed by the institution they have helped.

As CARE has stated: "We can, and must, share the knowledge we have gained in the last decade. There can be no progress, no democracy, no lasting peace while the world is still suffering from mental famine."



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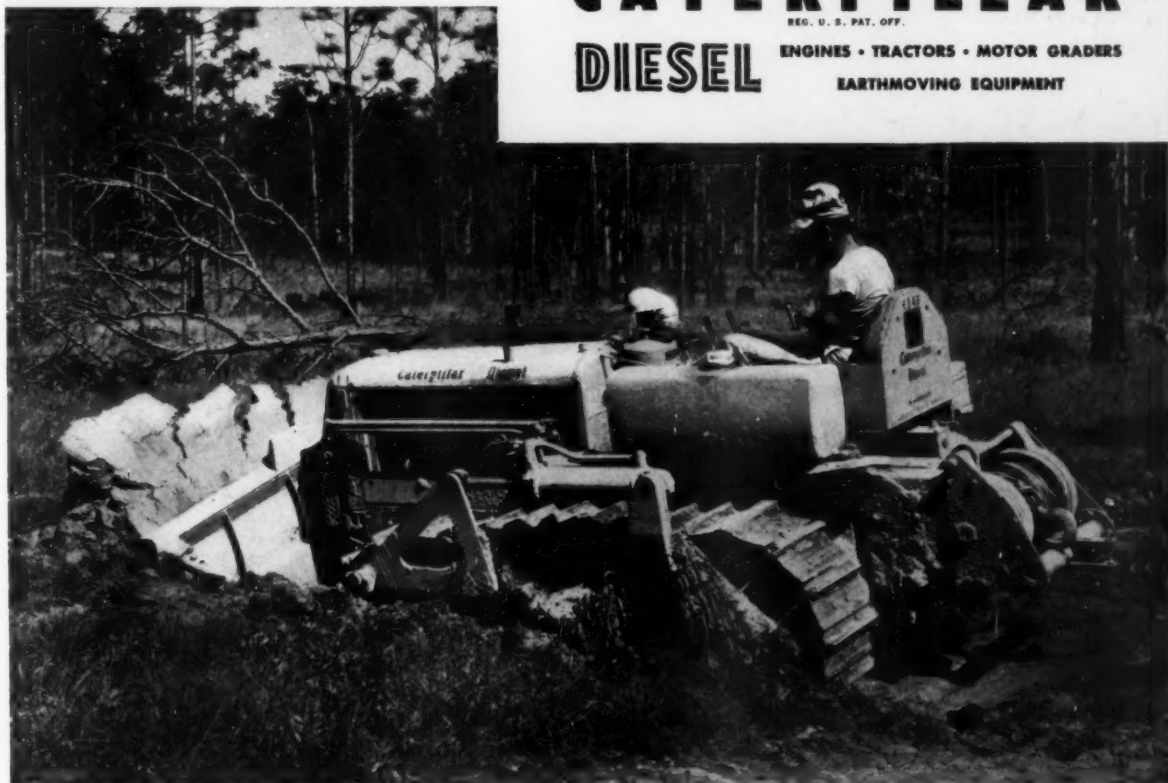
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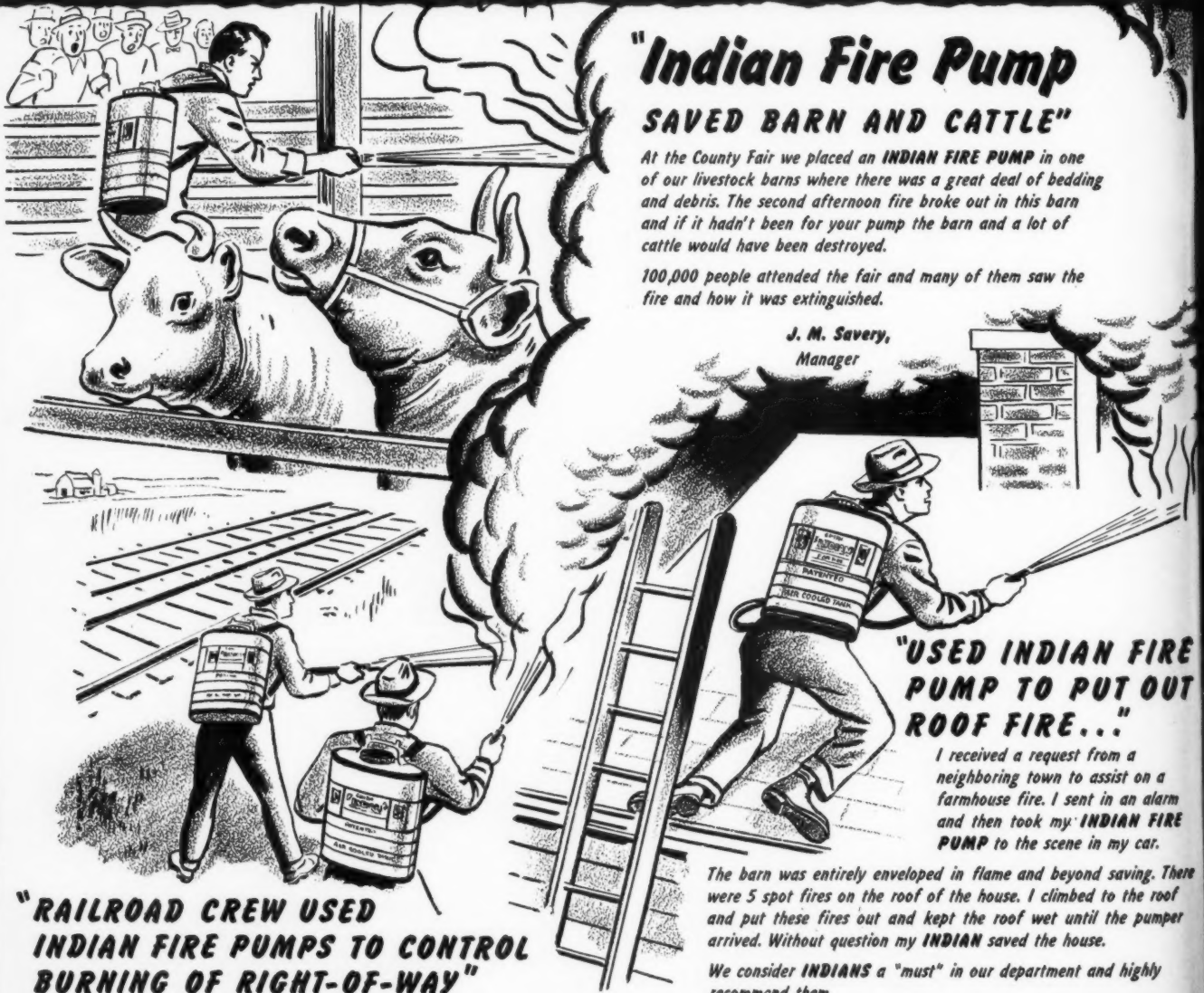
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